

THE CULTIVATOR.

NEW

"TO IMPROVE THE SOIL AND THE MIND."

SERIES.

VOL. I.

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THE CULTIVATOR

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THE FARMER'S MUSEUM,

(Each no. containing 16 pages.)

Is made up of selections from this paper, and published monthly at 50 cents a year—Fourteen copies for \$5.00—Thirty copies for \$10.

THE CULTIVATOR.

MONTHLY NOTICES.

Communications have been received since our last from R. A. Avery, An Enquirer, (whose letter cost us 56 cents) J. S. S., A Virginia Farmer, P. Peterson, S., M., Quercus, S. C. Smith, George Geddes, J. M. Ellis, Georgian, J. Crawford, Edgar, (this as well as his previous communication was written with a pencil, and will cost us too much labor to decypher it,) A Practical Farmer, L. A. Morrell, M. Bingham, A Friend to Farmers, S. Weller, N. N. D., Geo. Bement, S. Peck, C. Colfelt, N. Loomis, S. Tillotson, F. J. Betts, N. Clean, J. Smith, A. McDonald, W. A. Dunlap, W. McKinster, S. W. Jewett, G. A. Mason, W. H. Sotham, A Cayuga Farmer, R., A Subscriber, N. W. C., L. Physick, J. S., Peregrinator, Richard Cowles, H. A. P., F. Rotch.

We are indebted to JOSEPH BRECK, Esq., Ed. N. E. Farmer, for copies of Dr. Dana's Prize Essay on Manures, and Mr. Foote's Prize Essay on the same subject—to Lt. Gov. DICKINSON for a copy of his Address before the Queens Co. Agricultural Society—to Dr. LEE for his Address before the Erie Co. Ag. Society—to C. P. HOLCOMB, Esq. Devondale Farm, Wilmington, and to some unknown friend, for copies of the Transactions of the Newcastle Ag. Society for 1843—to A. RANDALL, Esq. for the Western Farmer's and Gardener's Almanac for 1844.

CHANGE IN THE FORM OF THE CULTIVATOR.

A correspondent says:—I see no objection in the change of form, except that you cheat us a little in quantity by the increased amount of margin." In this, however, he is mistaken. The sheet has been enlarged, as he will see by comparing it with a former number, so that we give just the same amount of reading now that we did in the quarto form.

STATE AGRICULTURAL SOCIETY.

The annual meeting of the New-York State Agricultural Society, which took place in this city on the 17th inst., was well attended, and a good degree of interest was manifested in promoting the objects of the society. A brief account of the doings, will be found in another part of our paper.

THE ANNUAL CATTLE-SHOW AND FAIR.

It will be seen that Poughkeepsie is selected for the next Fair of the New-York State Agricultural Society; and the 18th and 19th of September are designated for the purpose.

The Premium-List, which will be found in another part of this paper, is published thus early in the year, that further time may be given than has hitherto been allowed for preparation. This winter season, with its stormy weather and long evenings, furnishes abundant opportunities to farmers for examining the List, and making timely preparations for the stock or other articles which it is in their power to exhibit in competition at the Fair. The facilities of reaching Poughkeepsie by steamboats will render the transit of cattle and horses easier to a large section of country where many of the finest animals may be found; and the same facilities will enable visitors to arrive and depart more conveniently, and be better furnished with accommodations than could well have been the case hitherto. We mistake the spirit of the Poughkeepsie people if they fail in making early and adequate arrangements for the multitudes that will throng their town on the occasion.

EXPERIMENT WITH POTATOES.

MR. CHARLES COLFELT of Mifflin co. Pa., informs us that he raised last season, 90 bushels potatoes on a quarter of an acre of land, and he thinks he should have had 125 bushels if the season had been favorable. He planted the potatoes on the 8th of May, in rows 3 feet apart. After they came up, he hauled out 8 cart loads of barn manure about half rotted, and spread over the tops on the rows—then run a one-horse plow on each side of the rows, to throw the manure over the potatoes and cover the manure with earth. Harvested in November. The same man also raised 120 bushels of potatoes on a "third of an acre" of land, which had been previously planted to corn and was destroyed by "cut worms." He put on 8 four-horse loads of long manure, spread it, furrowed the ground 3 feet apart, dropped the potatoes and covered them with the plow.

RESULTS OF SUBSOIL PLOWING.

MR. C. N. BEMENT states that a few years ago, he subsoiled part of a piece of ground which he planted to Indian corn. The piece was on a light, loamy or sandy knoll, and he subsoiled it in "strips," leaving alternate strips not subsoiled, all being manured alike. He ran the subsoiler about eight to ten inches deep. The season proved very dry, and where the subsoil plow was not used, the corn was so burnt up that it produced little or nothing; but where the subsoil plow was used, the corn remained green and flourishing through all the drouth—the strips were plainly seen at a distance, and the subsoiled part produced a good crop.

MR. B. made a similar experiment on carrots, and the results were even more strikingly in favor of subsoiling, than in the case first cited.

MR. COLMAN'S TOUR.

OUR readers will regret to learn that the publication of the first part of Mr. Colman's European Tour, has been delayed by an accident which befel him, and from which he came near losing his life. While visiting a farm near London, early in December, on horseback, he was thrown from his horse and so severely injured as to unfit him for mental or physical exertion for a considerable period. At the last dates, he had nearly recovered, and hoped to be able to prepare his first part for publication in the course of the present month.

COTTON IN NORTH CAROLINA.

WE are informed that Col. Thos. Ousley, near Halifax, N. C., has made an experiment on Doct. Cloud's method of cultivating cotton. He says "he is fully convinced that even here, (though not a cotton country,) our crops may be made to yield on an average *four fold*, compared with the usual method pursued here, which will amply repay the expense of manuring, as recommended by Dr. Cloud, and leave the land in good condition for a succeeding crop."

KILLING BRIERS.

MR. A. H. HALLECK informs us that the best way he is acquainted with to kill briars, is to cut them "in the old of the moon in August, and the sign in the heart—some few may grow the next year, but will present a feeble appearance, and with the aid of sheep may be easily exterminated." The time and manner of cutting briars above given, we know to be good from experience, but whether the moon has any special influence in the matter is another thing.

FARMER'S CLUBS.

WE have received from WM. MAKINSTER, a copy of the rules adopted by a Farmer's Club at Middletown, Ct. Mr. M. says the association has already produced considerable good. We have no doubt of it, and should be glad to see such clubs formed in every neighborhood. They are the very best means of eliciting knowledge on subjects connected with husbandry.

BIG BERKSHIRE.

MR. ASAHEL FOOTE, of Williamstown, Berkshire co. Mass., slaughtered a Berkshire hog on the 9th of Jan., the dressed weight of which was 708½ lbs! He was 2 years and 8 months old, and had been fattening only from the 10th of June last, at which date he was estimated to weigh 300 lbs. His fare for the first three months was whey with a little corn in the ear occasionally—during the last 4 months was Indian meal, as much as he would eat—or about 6 quarts per day. His rough fat was eighty pounds—that of his hams, pared unusually close 52 lbs. each. Thickness of the heaviest of the clear pork was full 10 inches. Leaf lard, 80 lbs.

INQUIRY—APPLES.

A friend asks whether any information can be given in regard to a defect in apples called at the south the *ague*—“consisting apparently in a collection of watery matter under the skin—though that part is harder than the remaining part of the fruit.” He says the disease in his “orchard has been confined to the *Pound Sweeting*.” We have always supposed that this defect belonged only to certain kinds. And did not extend to varieties in general. We have seen it more frequently in *sweet apples*.

CORRECTIONS.

In the notice of Burrall's Clover Machine, last month, p. 12, for “two to six hands,” read “two to six horses.” Same No. p. 11, in the notice of Mr. Brush's premium crop of corn, it is stated that he raised 405 bushels on three acres. We are informed that it was 405 bushels of ears of corn.

AGRICULTURAL SURVEY OF NEW-YORK.

WE state, in answer to the Goshen Standard, that Prof. EMMONS has been engaged during the past season in making a collection of soils in different parts of the state, which he is now engaged in arranging and analysing. His object, if we understand it aright, is to make a thorough examination and classification of the soils of the state.

MAINE FARMER.

THIS paper is hereafter to be published at *Augusta*, Me. instead of Winthrop. Dr. E. HOLMES, one of the most scientific men in the country, continues its editor, and Mr. EATON, well known as formerly one of the publishers of the Kennebec Journal, is proprietor and publisher. We have received the first no. of the new series—it is much improved in style and appearance, and we would say to all well wishers to the prosperity of the *down east* state, if you *don't* take the Maine Farmer, you make a *bad calculation*.

NORTH AMERICAN REVIEW. JANUARY.

THIS is a capital number of this excellent quarterly. Its articles are, Griswold's Poets and Poetry of America—Palfrey's Lectures on the Evidences of Christianity—The German Tariff League—Gervinus' History of German Poetry—Debts of the States—Prescott's Conquest of Mexico—Sam Slick in England, with a copious chapter of critical notices. The North American has reached its 122d no., and as a record of American literature is unrivalled. The subjects of the present issue are treated with great ability, and will be read with interest. If the N. A. R. could take the place of the trashy picture magazines in the hands of many readers, we doubt not the result in creating a more healthy tone in the public mind would soon be manifest. OTIS, BROADERS & Co. 120 Washington st., Boston, publishers.

MORSE'S CEREOGRAPHIC BIBLE ATLAS.

THE first no. of Mr. Morse's Bible Atlas has just been received, and has excited our surprise and admiration at the rapid advance he has made in that style of engraving, since his first specimens were before us only some two or three years since. This no. contains “Maps of the Countries mentioned in the Bible;” “Journeys of the Israelites;” “Palestine from the latest authorities;” “Plan of Jerusalem;” and “The Environs of Jerusalem.” The maps are large quarto, beautifully drawn and colored, and such as should be in possession of every reader of the inspired volume. Mr. Morse's Maps, or Atlases, are furnished to the subscribers of his excellent paper, the Observer, we believe gratis, and are doubtless prized as they should be by its readers.

DURAND CORN.

WE shall be obliged to Mr. DURAND for a few ears of this corn, when he can send it by private conveyance.

ASPARAGUS.

MR. J. C. BARBER, Winstead, Ct., in a late letter to the Cultivator, says:—“Salt or brine will kill grass or weeds among asparagus, and be a benefit to the plant.”

WESTERN FARMER AND GARDENER'S ALMANAC, for 1844: By A. RANDALL, Cincinnati. This is the best thing of the kind we have seen. It contains many interesting articles, with handsome illustrations, among which are twenty plans of houses—all “well got up.”

AGRICULTURAL IMPROVEMENT.—Dr. LEE of Erie, we are happy to say, has been made Chairman of the Committee on Agriculture in the House. He is very desirous of effecting such legislation as will advance the cause of good husbandry in this state; and would be happy to receive any suggestions from the friends of agricultural improvement.

The American Farmer copies without credit “*Proper Points of Sheep*,” “*Ayrshire Cattle in Germany*” “*Disease among Cattle*,” and “*Prize Breeds of Swine in England*,” all of which we had taken some trouble to condense from our foreign papers.

DISEASED POTATOES.—Potatoes have been affected in some sections, the past year, by a disease which is by some supposed to be analogous to smut in wheat. “A Subscriber” from Monroe country, recommends that when potatoes which are thus affected, are planted, a compost should be applied to them to destroy the fungus. He says, “take salt, lime, and plaster, of each a bushel, and of ashes ten bushels—mix them together, and put a handful on each hill before covering. I would also put clear lime, and clear plaster on some hills. If any person raised potatoes last year that were not diseased, in the same section where others were so, it would be useful to describe the mode of cultivation.”

VALUABLE COW.

P. H. SCHENCK, Esq. of Matlewan, Dutchess co., has given in the Am. Agriculturist, a statement of the milk and butter produced by a cow of his, during parts of the years 1842 and 1843. The cow is a polled cow, or hornless, and her color red and white. In 1842, Mr. S. kept her milk separate from that of his other cows for one week. She gave 18 quarts per day, and made 15 lbs. of butter. During this time she was kept on grass only. In 1843, Mr. S. had her milk kept separate from the 21st of May to the 10th of June, 21 days. She gave 16 quarts of milk per day, and this in the three weeks produced 65½ lbs. of butter. On the 15th of June, from 15½ quarts of milk, 3 lbs. 8 oz. of butter ready for the table, was made. This is certainly a most extraordinary yield of butter.

NEW ARTICLE OF FOOD FOR ANIMALS.

MR. E. RICH of Troy, N. H., has communicated to the Keene Sentinel, the result of some experiments made by him on the value of the tops and roots of common Comfrey, (*Symphytum officinale*), as food for cattle. Two cuttings in June and September, yielding six tons per acre of good fodder, and the root which should be harvested only once in two years, producing 2,400 bushels per acre. Experience showed both top and root to be very palatable and nutritious. Mr. Robinson, near Portsmouth, has also tried the plant for this purpose, and finds his stock of all descriptions to eat the tops when cut most greedily. His product was at the rate of eight tons per acre. This was on moist ground, which seems the best adapted to the growth of the plant. Mr. R.'s plants were in rows fifteen inches apart. This, we think, in rich ground would be too close planting. Comfrey is easily propagated by cutting the roots into sets, as is done with the potatoe. It may prove one of our most valuable plants for animals, but further experiments are necessary. They can easily be made.

TURNEPS AS A GREEN CROP FOR MANURE.

B. W. COOPER, a farmer of Camden, N. J., suggests in the Farm. Cab. the propriety of sowing turneps for enriching land. The suggestion is a good one, and would probably succeed. He says—"I have reason to believe that a crop of turneps when buried leaf and root, will be found superior to almost any other that can be obtained for the purpose of plowing in as a green crop for manuring." He recommends that a pound of seed, costing some 50 cents, be sown upon corn, which is of course when ripe, to be cut, and the turneps plowed under.

EFFECT OF GUANO ON CORN.

WE find in the Boston papers, a notice of the Horticultural exhibitions in that city, at which some sweet corn was shown by Mr. Teschmacher of Boston, exhibiting in a striking manner the power of this celebrated manure on this plant. We perceive that a quantity has been imported at Baltimore, to give the farmers of that vicinity an opportunity of testing its remarkable qualities. It is sold at five cents per lb., and 100 lbs. is considered an ample supply for an acre. It can scarcely be doubted that science will yet furnish an artificial compound equal in value to this animal product, though the experiments hitherto made must be considered as partial failures. The Boston paper says—"A prominent object of attraction was the produce of two seeds of sweet corn, planted by J. E. Teschmacher, in the public garden, Charles st. on the 12th of May, in poor sandy soil. One without any manure, gave as product, one stalk and one ear, weight 1½ lbs. The other manured with guano, gave as product, eight good ears, and four or five useless ones, weight 8 lbs. Only two spoonfulls of guano were used on this hill."

HEAVY PIGS.

WE copy the following from the Louisville Journal. Few litters of pigs, we think, can be found to exceed Mr. Spilman's, and those must be unreasonable, who with such evidence before them as is afforded by the weight of Mr. Sprague's or Spilman's hogs, still complain of the light weight of the Berkshires. "Mr. Thomas B. Spilman of Hunter Bottom, Carrol co. Ky., recently slaughtered 9 Berkshire pigs, full blood, of one litter, 20 months and 6 days old, weighing 3,429 lbs. Mr. S. says that

these hogs were fed as a majority of farmers feed their hogs, no more care being taken of them than is generally taken of common hogs. The weight was certified by two respectable citizens. Three weighed over 400 lbs. each. Mr. S. banters the state to beat him with one litter of the same number of pigs."

NEW DOMESTIC FOWL.

IN the Queen's aviary at Windsor, are many birds of the most rare and valuable kinds. Among these, according to the London Times, "are seven Cochins, five hens and two cocks, imported direct from Asia, and presented to the Queen. Such is the extraordinary size of these birds, that when full grown they will stand on the ground and feed from a table 3 feet in height; their usual weight being from 22 to 24 lbs. per couple. Their eggs, the shells of which are of a dark mahogany color, possess a delightful flavor, and are highly prized by the Queen. One of the pullets has laid 50 eggs in less than eight weeks." Sir George Staunton, in his "Macartney's Embassy to China," was the first to make this bird known to the European public, and it has been described by Temminck under the name of Fire-backed Pheasant of China, (*Euplocamus ignitus*), and is a most beautiful as well as large and rare bird. It is figured among other pheasants in Temminck, and in the Encyclopedias. It is supposed that hybrids of this bird and the common domestic fowl, would be most valuable to the farmer or poulterer.

SALT AS A MANURE.

A writer in the Farmers' Journal says that Salt has the effect to keep soils moist in the heat of summer, and soft in the winter's frost; thus it suits dry soils and seasons, while most other concentrated manures require wet—that by this and its penetrating quality, it keeps every thing in the soil in the softest and most soluble state, best fitted to work on each other, and to be acted on by the air and weather.

SILK.

THE Newburgh Telegraph contains a communication on the silk business, from Nathaniel G. Church. Mr. C. has been experimenting in this business for four or five years, successfully. He says he means to keep an exact account of all the expenses and results, in order to lay before the public, another season, satisfactory evidence of the utility and importance of the business. We hope he will do it—facts are what the people are waiting for.

LARGE HOGS.

THE Boston Cultivator says that Capt. Daniel Chandler of the House of Industry Farm and Garden, at South Boston, has lately killed 27 hogs, which weighed on an average 415 pounds. They were one year old last spring. These hogs came (when young,) from Columbia county, N. Y., and were said to be a cross of the Berkshire and Grass breeds. "Capt. C." continues the account, "keeps his hogs in summer, on swill from the house, and vegetables from the farm and garden, until within three months of the time of killing, then meal is added to these articles."

BARBER CO. (ALA.) AG. SOCIETY.

A letter from a friend in Eufalla, Ala., informs us that an agricultural society had been formed, and a fair holden in that neighborhood, which promises to be very useful in exciting a spirit of improvement, &c. The writer describes the country as new, but improving rapidly. Ten years ago, it is said, it was an unbroken forest. Cotton is now selling at as high prices as are brought in the United States—a considerable quantity has lately changed hands at 8½ to 10½ cents per lb.; the farmers and planters are vying with each other in the production of a good and beautiful article. The writer of the letter alluded to above, wishes to know whether marl should be spread on the land immediately after being dug—what time and manner it should be applied, in what quantity, whether mixed with other manures, &c.

THE CULTIVATOR FOR PREMIUMS.

DURING the last month the Cortland Co. Ag. Society of this state, have ordered 24 copies of the Cultivator—the Newcastle, (Del.) 20 copies—the Ohio and Brooke counties (Va.) 14 copies, and the Muskingum (O.) 8 copies for premiums.

FARMING IN THE WEST.

THE farm of Mr. THOMAS NOBLE, near Massillon, Stark county, Ohio, furnishes one of the best examples of systematic and profitable cultivation, to be met with in the country. Mr. Noble is by birth an Englishman, and came to this country and settled where he now resides, some eight or ten years since. His staple products are wheat and wool. The soil of the farm is not naturally of the richest kind, but is well adapted to the course of husbandry pursued by its owner. With the exception of the roughest and poorest part, the whole is, in its course, alternately pastured with sheep and sown to wheat. Sheep admirably prepare the land for wheat, and a better course could not perhaps be pursued. He keeps fifteen hundred Merinoes, and a small flock of Leicesters. The latter were imported a few years since by Mr. Henry Parsons, late of Massillon, now of Hamilton, Canada. These were a very superior lot of sheep, of most beautiful form, and equal to any we have ever seen of that noted breed. Mr. Noble says he can "feed and clothe" a given amount of population, from less land and with less expense, with this breed of sheep, than can be done with any other stock. These sheep, though fed no better than the Merinoes, show an astonishing accumulation of fat. A buck from this flock, which had never been fed with any thing but hay and grass, got cast on his back last summer, and strangled. His carcass was found completely encased with fat, like a fat hog's, from one to two inches in thickness. The average weight of their fleeces is from six to seven pounds of washed wool.

The Merino flock is a very valuable one, and has generally averaged over three pounds of wool per head, which for the last eight years has been sold in New-York at an average price of fifty cents per pound. Mr. N. has lately crossed some of this flock with an excellent buck descended from the Paular sheep imported from Spain some years since by William Jarvis, Esq. of Weathersfield, Vt. This has proved a very valuable variety for the northern section of the country. They are very hardy, are better formed, and produce considerably more wool than the Merinoes generally do.

Mr. Noble feeds his sheep on a very judicious and economical plan. They are all sheltered under his barns and in sheds, in winter, and are fed with cut straw; a bushel of wheat shorts and a bushel of potatoes or turneps, being allowed to every hundred sheep daily, in addition to what straw they will eat. The ewes, just before lambing, have hay instead of straw. The straw is cut with one of Eastman's cutters, worked by horse power. It performs well, and Mr. N. is satisfied that there is a great advantage in cutting nearly all the fodder which he uses—clover hay and straw particularly. By cutting, the stock eat it much more readily, and none is wasted. The turneps or potatoes, (Mr. N. prefers the latter,) are cut by a machine brought from England, and which does the work much better than any other kind we have seen. A man can readily cut with it a bushel of roots per minute, and it cuts them in the very best shape for the sheep to eat: that is, in pieces half an inch thick, and three-fourths of an inch wide. It is not likely to get out of order, even in cutting frozen roots, and if a knife should get broken, it can be replaced by a new one in a moment. It is called *Gardener's root cutter*, and is, we see, highly recommended in the English agricultural journals.

The manner in which Mr. N. raises his potatoes, is also worthy of particular notice, as the plan may be profitably adopted on many other farms. We will, as briefly as possible, describe what we saw and learned of Mr. N.'s process of cultivating twelve acres of potatoes. The ground had been in grass for several years before, and was pastured with sheep the previous year. The field was level, and the soil of middling quality, free from stones or other obstructions. On a part of the field, some manure was put, and as the ground was plowed, this was scattered into every fourth furrow, and the potatoes at once dropped on it, at the distance of twelve to fourteen inches, taking care to drop them at the edge of the furrow, that the sprout might be the less obstructed in com-

ing up. The next furrow covered the manure and the potatoes. In this way the whole field was planted, excepting that on the part for which there was no manure, the potatoes were planted without it. A roller was then drawn over the field lengthwise of the furrows, to even down the edges. When the potatoes were coming up, a light harrow was passed along the rows, after which a double mold board plow, run once between the rows, completed the cultivation. The average yield on the twelve acres, was 250 bushels per acre. The planting was deferred till the season was so far advanced that the potatoes vegetated quickly, and the rapid decomposition of the sod and manure caused them to grow so vigorously that they got the start of all weeds, &c. and soon covered the ground with their tops. To adopt this plan successfully, it is necessary that the ground should be free from stones—at least, such ones as would be any hindrance to the passage of the plow,—and it should be nicely plowed, with rather a shallow furrow. The plow which Mr. Noble used, was the celebrated *Ransome plow*, which is so highly esteemed in England, and which has taken the highest premiums at the most particular trials made there. It performed its work in most admirable style. The ground on a part of it was rather hard trodden, yet the work was all done without the least balk or defect, and with great ease, by two horses. It would be generally considered rather a ponderous implement, compared with the Eagle plow of Ruggles, Nourse and Mason, or the Center-draft plow of Prouty and Mears, but it evidently runs very easy, and will cut the furrow to any desired depth with the greatest exactness. It is made with two wheels, one larger than the other, to run in the furrow, but it may be used with only one. The handles are both fastened to the beam, the mold-board being movable, and so small that it may be drawn nearer to the beam, or thrown out wider from it, according to the width of furrow it is desired to turn. Corresponding to this contrivance of the mold-board, there are shares of different width, to be used as the various kinds of soil and the different objects of the farmer may render expedient. Mr. Noble does not object to the weight of this plow, and the plowman never attempts to throw it round at the ends—the horses, (as all teams should be,) are so well broken that they take it just where it is wanted, to an inch, and the furrows are cut through the field as straight as if they were done by a line. The English plowman prides himself much on the excellence of his work, and bred to it as a *profession*, he arrives at great perfection.

Mr. Noble has also the celebrated Scotch plow, made by WILKIE, wholly of iron. It is quite similar in shape to Ransome's, but has shares of wrought iron and steel. Several shares, varying considerably in width, are designed for the same plow—some are very narrow, not more than four or five inches wide—calculated for hard and stony ground. This plow is much used on the hard flinty lands of Scotland and Wales, and Mr. Noble states that in such situations they will do much better work than any other plow he has seen. The narrow and long pointed share, together with the great strength of the implement, render it particularly well adapted to such work.

Mr. Noble raises about two hundred acres of wheat annually. He adopts generally the *drill* method of cultivation, which he thinks has many advantages over the broadcast method—particularly in the security it gives the crop from rust and mildew. Mr. N. states that he has repeatedly known a drilled crop to mature well, and give a good grain, with a bright straw, when that sown broadcast, and in the same circumstances in other respects, was spoiled by mildew. The greater chance for the circulation of air, which the drilled crop possesses, is thought to be the cause of this difference. For sowing in rows, Mr. N. practices two modes, viz: sowing with a machine, and sowing by hand. The machine is drawn by a horse, and sows three rows at once, sixteen inches apart—finishing the work in the neatest manner as it goes along. In the other method the ground is prepared as in the usual manner, and a small plow called a "ribbing plow," of singular construction, which makes a narrow furrow two or three inches deep, is then drawn across the

field at intervals of sixteen to eighteen inches; after which the seed is sown by hand, and a harrow passed lengthwise of the furrows, which draws the wheat into the furrows, and buries it with so much nicety that it looks as if it was sown in rows. Grain sown in either of these ways, stands the winter better than if sown broadcast. The rows of grain being in a small hollow, the rains instead of washing the earth away from the roots, and leaving them to perish by exposure to the winds and frost, are constantly bringing a little more earth to the plant, which enables it to retain its hold, throw out more lateral roots, and push vigorously forward with the first favorable weather.

Mr. Noble uses as much seed as if he sowed broadcast. He sows two bushels per acre, which he thinks is preferable to a less quantity, for soils of medium richness. The richer the land, the less seed is required; because plants tiller out or spread in rich land, more than they do in poor. The yield of Mr. N.'s wheat is usually about 25 bushels per acre. In 1842, he had one field of 40 acres, that turned out an average of 35 bushels.

Mr. Noble keeps no more horses and cattle than are necessary to carry on the farming operations—that is, to perform the work and supply meat and dairy productions for home consumption. By wintering all his stock in a great degree on straw, (which he takes great care to save in good order,) with roots and some shorts, or meal, he is saved the necessity of appropriating a large quantity of land to meadow, and the expense of making a great deal of hay. But his animals are all well sheltered and taken care of, and are, though with moderate expense of feed, kept in fine order.

Mr. Noble's implements are all of the best kinds, and when not in use, are put under shelter from the weather. His harrows in particular, as well as the tools we have mentioned, are much better than are commonly used; and in the construction and use of this implement, it is believed the English are generally ahead of us. Many of our farmers make their harrows, especially for clear land and for seeding, too heavy. The work would be better, more easily and more expeditiously done, by using a lighter harrow, with more slender and sharp teeth.

Mr. Noble pays particular attention to the substitution of machinery and the labor of animals, for that of men, wherever practicable. In the adoption and prosecution of all his plans, *profit*, ultimate or immediate, is his primary object. Chimerical or visionary schemes on the one hand, and the errors of antiquated habits on the other, he alike endeavors to avoid. With a far-reaching glance, he clearly sees that the true course by which to attain the desired end, is the adoption of all *real improvement*—the observance of system and order—doing every thing in the right time and in the right manner. He superintends his business in *person*—constantly exercising a vigilant oversight of all, remembering the Prompter's adage, "*the eye of the master will do more work than his hands.*"

VALUE OF TIMOTHY HAY.

MR. LEWIS SANDERS, a very distinguished farmer of Kentucky, says, through the Louisville Journal, that he believes Timothy hay (*Phleum pratense*), is of little or no value, that sheep and cattle will die if fed alone on that kind of hay—that it was remarked by Thomas Gough, a noted cattle breeder, "that he would prefer giving his cattle dry leaves in winter, to Timothy hay"—that Gen. Jas. Shelby, another noted stock breeder, is nearly of the same opinion. We think this rather too severe a denunciation of Timothy hay, even for the latitude of Kentucky—at the same time, we are of the opinion that many persons much overrate the value of this hay. It seems necessary that Timothy should be cut at a critical time, or its value is much diminished. If cut too early, it is light and chaffy; if cut too late, it is hard and strawy. It is very common to let it stand till it is dead ripe, and those who practice this, contend that it is the best mode; first, because it requires less making, and second, that great benefit is derived from the *seed*. Tavern keepers sometimes prefer the "ripe" hay, because it "spends well." Horses will eat *hard* hay better than cattle and sheep—their jaws and teeth seem better calcu-

lated for *grinding*—consequently, horses will get along with Timothy hay that was dead before it was cut, better than other stock; but even they find living on that *alone*, a pretty "poor business." But if Timothy is cut *exactly* in the right time, when it is nearest in full bloom, and well cured, we have found it to make hay which both cattle and sheep eat very well, and which seems to be quite nutritious.

EFFECTS OF TEMPERATURE ON VEGETATION.

A REQUEST.

It is well known that one of the effects of an approach to or receding from the equator, is a corresponding increase or retardation of the coming forward of vegetation, particularly its blossoming. Several efforts have been made to ascertain how far such influence of temperature, as developed in successive latitudes, extended; but in countries where a meridian line of some twenty degrees would pass several kingdoms, sufficient unity of action could scarcely be expected to secure very useful results. Another difficulty in the way, is finding any plant or tree which will thrive under the equator and in the latitude of 50° or 60°. We are not aware that more than one attempt has been made in the U. States, to turn this scale of nature's graduation to account, though the extent of a meridian line wholly within our own territory, would seem to be very favorable for such an examination. A few years since, Prof. Bigelow of Boston, entered upon the task by means of correspondence, and the results as obtained by him are given in an ingenious although imperfect memoir in the 4th vol. of the American Academy. Among the trees, the period of the flowering of which was noticed, the peach tree was the most extensively returned, and it may be remarked that this tree is perhaps better suited than any other for this purpose, it flowering in the open air from the equator to at least the forty-fifth degree of latitude. The following are some of the results obtained from this tree:

Place of Notice.	Lat.	Long.	Peach in Blossom.
Fort Claiborne, Ala.....	31° 50'	87° 50'	March 4.
Charleston, S. C.,	32 44	80 39	" 6.
Richmond, Va.,	37 40	77 50	" 23.
Lexington, Ky.,	38 06	85 08	April 6.
Baltimore, Md.,	39 21	77 48	" 9.
Philadelphia, Pa.,	39 56	75 8	" 15.
New-York, N. Y.,	40 42	74 9	" 21.
Boston, Mass.,	42 23	70 52	May 9.
Albany, N. Y.,	43 39	73 30	" 12.
Brunswick, Me.,	43 53	69 55	" 16.
Montreal, L. C.,	45 73	73 11	" 21.

From this table, and from other evidences, Prof. Bigelow infers with much probability, that the difference caused by temperature in the north and south of the U. States, is at least two and a half months; a most important fact, and which does not seem to be generally taken into the estimate of the agricultural capabilities of the respective sections. Longitude appeared to produce little difference in the results, but if the country west of the Rocky mountains were to be taken into the account, such would not be the case, it being ascertained that the average temperature at the mouth of the Columbia, does not vary far from that of Georgia, though many degrees to the north. It appears that in the year alluded to by Prof. B. that at Valencia in Spain the peach blossomed on the 19th of March; the apple tree at London, May 8th; and the cherry and pear at Geneva in Switzerland, April 3.

We should esteem it a great favor if such of our friends and correspondents as keep floral calendars, or such records as enable them to determine such matters, would inform us of the time of the blossoming of the peach or apple; the average times of planting corn, and its ripening; the sowing of wheat and its harvesting. If this could be generally done, and the information so embodied collected in tables, many useful inferences in reference to our climate, &c. might be deduced.

Mr. D. T. Whitmore, near Williamsburg, Va., says that he has a piece of meadow land so completely covered with peppermint that nothing else will grow, and he wishes to know what would be the best course to extirpate it. Will some one who has had experience on this subject answer the inquiry?

FIRES FROM ASHES.

THE records of our Fire Insurance offices show that the most common cause of fires is the use, or rather abuse of stoves; and the next in frequency is the deposit of ashes in wooden vessels, or other unsafe places. Strange as it may seem, not one-half of the dwelling houses in this country are provided with safe places of deposit for the ashes daily accumulating from our wood fires, and in a majority of them a barrel or box performs the office that should devolve on an ash house of brick or stone. This wooden depository is not unfrequently placed in the wood house, or some other of the out-buildings, ready at any time to ignite, or if disturbed by winds, to furnish the spark that will kindle a destructive conflagration. It is generally considered the extreme of prudence, if the ashes, when taken from the hearth and glowing with red hot embers or coals, are placed in holes dug in the center of the surface of the cold ashes, and slightly covered with them, and not allowed to come in actual contact with the sides of the box or barrel. To us it seems most strange that under such circumstances fires from ashes do not more frequently occur, and the great danger of such a disposition of ashes would prevent its recurrence were the evil fully understood.

Almost every family that is unprovided with an ash house of brick or stone, and that is in the habit of using a wood substitute, must have met with cases in which, in spite of all their care in depositing their ashes, serious danger from fire has arisen, the boxes have been burned, charred, or destroyed, greatly to the wonder of the parties interested. Houses are burned, and the misfortune is placed to the account of the incendiary, when it should be placed to the account of the ash box. There are some facts connected with this subject that should be more generally known, as they might have the effect of placing house keepers and house builders more on their guard.

Not long since a friend of ours on taking possession of a place which had been unoccupied for several weeks, when he came to take up the first ashes made from his fires, found that his predecessor had used an old hogshead, and on examination this was found about half full of ashes, covered so as to exclude the rain. A hole was made in the center of these old ashes and the new ones deposited. The next day there was an alarm of fire, and the hogshead was found in flames. Fortunately the fire occurred in the day time, or his buildings, valuable as they were, would most certainly have been destroyed. This occurrence is not an unusual one, and the frequency of losses from this source, induced Prof. H. of Vt. to enter upon a series of experiments to ascertain the cause. From instances that had fallen under his notice, he was induced to believe that when embers or live coals are placed among dry ashes, no matter what may be their age, or how long they have been deprived of fire, a second ignition takes place, which sometimes does not cease until the whole mass has been burned over, although it is frequently arrested before it has reached this extent. Boxes filled with cold ashes, had a quantity of red hot embers and live coals from the hearth placed in their center, and then carefully covered and closed. It was found that the heat gradually increased, the fire extended through the whole mass, the box became charred on the inside, and when air was admitted combustion ensued at once. The same result took place when the box was burned through to the outside. In order to determine whether the combustion of the ashes took place in consequence of the coals which are usually left in ashes, boxes filled with sifted ashes were tried in the same way, and ignition took place as before; proving either that a sufficient quantity of fine particles of coal remained to support combustion, or that a sufficient amount of nitrous matter was obtained from the atmosphere to allow ignition to take place. In either supposition, the manner in which numerous fires annually take place seemed clearly established, and the danger of placing ashes in wood vessels of any kind clearly shown. Nothing but absolute necessity should allow the practice of having barrels or boxes of ashes about our dwellings or out-houses. A safe ash house is as indispensable as a kitchen, and no house should be built where this receptacle is not provided. To

the farmer, ashes are of great value, and to waste them or sell them as many do, is the worst kind of prodigality. Leached, or unleached, they are one of the best promoters of fertilization, and should be saved with great care; but never at such frightful risks as the destruction of the farm buildings. Of this there is not the least necessity; the cause of the danger once understood it can be readily guarded against, and if insurance companies would look to this matter in their policies, the evil might be arrested without difficulty.

MR. PELL'S FARM AND DR. UNDERWOOD'S VINEYARD.

At a meeting of the New-York Farmer's Club, a spirited and valuable association, Mr. Meigs made the following statements respecting the farm of Mr. Pell of Ulster co., and the vineyard of Dr. Underwood, at Croton Point, Westchester co. We copy in substance from the Report given in the N. Y. Tribune.

Mr. Pell uses lime extensively on his farm; has used 300 bushels per acre, prefers oyster shell lime. He has used charcoal at the rate of 52 bushels per acre. With this charcoal dressing he last year obtained wheat at the rate of 78 bush. 24 qts. per acre. [For Mr. Pell's account of this wheat, see Cult. for 1843, p. 197.] Mr. Pell had cut wheat so early that milk would be forced from the berry by the pressure of the thumb and finger. This wheat weighed 64 lbs to the bushel, and was of the most beautiful quality. Mr. P. had cut clover and housed it on the same day, sprinkling about a bushel of salt over every load. This clover retained its color, and was preferred by cattle to that cured in the old way. Mr. P. has 20,000 apple trees in full bearing. He has sent to market 4,000 barrels of apples in a year, many of which are sent abroad and sold at the rate of eight or nine dollars per barrel. He kills the apple tree caterpillar by touching a sponge dipped in ammonia to the worm nests, and has banished them from his orchards. In dry weather he applies lime about the roots of his trees, and finds trees so treated retain their verdure and grow better in dry seasons than those not so treated. Mr. P. had 10,000 trees grafted by a company from Vermont. Two sawed the branches, two made the incisions, two inserted the grafts, and two more applied the wax composition. Of 20,000 grafts not one failed. The expense was \$150.

Dr. Underwood's vineyard contains 20 acres of Isabella and Catawba grapes, bearing as much fruit as the Dr. pleases to have remain on the vines. It is one of the finest vineyards in the United States. He has also on his farm, 1,700 apple trees, 2,700 peach trees, large quantities of the finest quinces, and many other fruits. His apples are of the best and choicest varieties, and command the highest prices in the New-York markets. These are only a few of the farms and orchards, which will well repay an examination by the lingering traveler, along the margin of the noble Hudson.

ADVANTAGES OF MARL FOR COTTON.

MR. J. H. HAMOND furnishes to the South Carolina Ag. Society, a statement of his experiments in the use of marl, from which we gather the following:

Experiment No. 2.—Very light sandy soil, 1843.			
Unmarled acre,	361 lbs.	Seed Cotton.	
100 bushels do.	451	do.	Increase 90 lbs. 24.9 per cent
200 do do.	384	do.	do. 23 6.3 "
300 do do.	173	do.	decrease 188 52. "

The land being very old, is bare of vegetable matter for marl to act on, to which, more than to the texture of the soil, inferior as it is, I attribute the failure of any great improvement from it. I make the statement, however, because it is valuable in many respects. It shows the danger of heavy marling on worn land, without previous rest or manure. The acre with three hundred bushels has been destroyed. There is one rich spot, the bottom of a small basin in the center of it, which produced nearly all the cotton gathered. On the rest of it the weed mostly died as soon as it came up—one hundred proves a better quantity than two hundred bushels, and perhaps a little less would have been still better on this soil.

DR. LEE'S ADDRESS.

THE notice which we had prepared of the proceedings of the Erie Co. Agricultural Fair, was mislaid, and we only refer to it now for the purpose of giving some extracts from the excellent address of Dr. LEE before the Society. The papers prepared by Dr. L. on agricultural topics for the Buffalo Com. Advertiser, had proved him to be adequate to the important duty assigned him, and the address is of the first order. We are happy to state that Dr. Lee is now in the Legislature, a worthy representative of the agricultural interests of the farmers of Erie and the state. We would remark that in the matter of oats and barley, Erie will probably remain without an equal in 1843. The crop of oats that took the premium, was 100 bushels to the acre, and that of barley 80 bushels to the acre. Both these crops were grown by John Carpenter of the town of Wales.

Our first extract will relate to the value of ammonia to plants, and the best mode of obtaining it; and the second to the importance of warmth and quiet to domestic animals. The whole of the address will well repay perusal, and we are glad to perceive it has been embodied in a pamphlet form, with the proceedings of the Society.

VALUE OF AMMONIA TO PLANTS.

"I have stated to you that most plants require, in addition to water and carbon, a portion of nitrogen. This also comes from a gaseous substance in the atmosphere. Although nitrogen forms the largest element in the air, (79 per cent,) yet it has been pretty well settled that plants do not obtain their nitrogen by decomposing common air, but derive it from ammonia, which is furnished to the atmosphere in great abundance by a world of decomposing vegetables and animals. It is the ammonia that escapes from putrifying substances that causes their offensive smell. Now, again comes up the practical question: How are we to collect this highly volatile gas, and transform it at the cheapest rate, into wheat, beans, cheese and wool, of which it is an important element? Rain water has a strong affinity for ammonia—which is a compound of 14 parts of nitrogen and 3 of hydrogen. Water at 50° will absorb 650 times its bulk of this vegetable food. Every rain then, brings considerable quantities of it to the ground. It is the ammonia in rain water that imparts to it its peculiar softness in washing the hands or clothes. It is the ammonia in snow that makes it valuable as a manure; and it is the ammonia in rain water that causes it to putrify in some degree, like an animal substance, when water is permitted to stand in warm weather in a close vessel above ground. The first fall of rain after a long drouth, is much the richest in this gas. Being extremely volatile, it escapes into the air again after a warm shower, much quicker than water evaporates. What then will aid the cultivator of plants, and seize this volatile ammonia, as lime does carbonic acid, and hold it permanently about their roots, in such a shape that it will feed them all they need, and no more? For an excess of this stimulating alkali, like an excess of salt in our food, will destroy life instead of supporting it.

Common charcoal is the cheapest, and therefore the best material to apply to cultivated fields for this purpose. It will absorb 90 times its bulk of ammonia, and will give it out slowly to the vital attraction of the roots of plants. Most of you know that charcoal will correct the taint in meat—will purify rain water in a suitable cistern, so as to render it the purest water for culinary purposes. Such charcoal should be often renewed in filtering cisterns, and when saturated with ammonia, is an extremely valuable manure. The liberal application of this well known substance to the wheat fields in France, has mainly, in connection with the use of lime, added within the last ten years, 100,000,000 bushels to the annual crop of wheat grown in that kingdom. The charcoal should be sown in May, at the rate of 75 bushels per acre, well pulverised. This subject is one of vast practical importance. By studying the science of agriculture, you may grow fifty bushels of good wheat on any acre of your land, I have good reason to believe, every year, bating of course extreme casualties.

"You all know that a single kernel of wheat, will

sometimes, when its fecundity is highly stimulated, send up 20 stalks, and that each stalk will bear a head containing 100 kernels. Here is a yield of 2,000 fold. Nature then has rendered it practicable to harvest 2,000 bushels of good wheat from one bushel of seed. The most skeptical among you will not deny that 2,000 kernels have been produced from one kernel, and that the same natural causes that produce such a result in one instance, will ever operate, at all times, under like circumstances, in the same manner. Hence it is but reasonable to say that nature is quite as willing to produce 50 bushels of good wheat on an acre of ground every year, mark me, *if her laws be obeyed*, as she is to grow fifty bushels of weeds every year on the same ground."

IMPORTANCE OF WARMTH AND QUIET TO DOMESTIC ANIMALS.

"Permit then, a practical agriculturist, who has devoted the best energies of his mind for years, to the study of agricultural chemistry, vegetable and animal physiology, to say to those of you who are wool growers, that by keeping the animal warm in winter, cool in summer, and quiet throughout the year—by stimulating with the elements of wool the organs that secrete this valuable covering of the sheep, it is practicable to clip six pounds of wool as the product from the same amount and value of raw material that now yield you but three pounds. To accomplish this important result, this physiological change in the products of this living machine, you must *quiet the action* of the lungs. These expel from the system every moment, night and day, a needless quantity of animal food, which under more favorable and other circumstances, might have been converted into wool, tallow and muscle. Mark me. There is a positive loss, a needless throwing away of 20 to 50 per cent of the food in wintering all domestic animals, which is literally burned up by nature in this cold climate, to keep their blood and the whole animal some 40 or 80 degrees warmer than the temperature of the air with which they are surrounded. It is not merely the hay, oats and corn in domestic animals, and the bread and meat in man, which are consumed like the animal oil in a lamp, to warm the system, that are lost; but by inhaling a cold and dense atmosphere, and bringing a larger amount of oxygen gas into the lungs, and through them into the blood, than is needed, inflammations are generated, ending in consumptions, alike in man and beast. An animal is an electrical battery or machine. It is practicable so to excite the organs that form fat in a pig, in a positive degree; and so to quiet all the other organs of the animal by a kind of negative electricity, that the animal shall transform nearly all of its food that can be converted into fat, into that well known substance. The same remarks will hold true, in a good degree, when applied to the secretion of milk in cows, and the secretion of wool in the capillary organs of the sheep. On the other hand, it is quite as easy to make a pig secrete an enormous amount of bone, and an enormous amount of gristle—to have a hide as thick as a board, a nose like a plow beam, ears like sides of sole leather, and legs like an elephant!"

FRAUD IN LAND SALES.

A friend in Marysville, Tenn., informs us that extensive frauds are being perpetrated in that vicinity in the sale of lands. As our informant has not permitted us to use his name in connexion with his statements, we must of course withhold the names of the persons implicated, and can only give the information furnished us in general terms. It is stated "that some two or three years since, a grant was obtained through fraud, of Gov. James K. Polk, of a vast tract of land, purporting to be located in the county of Blount." It is further stated that those who have bought land under this fraudulent grant, have ascertained on removing to it, that it had been granted to others, who have occupied it for at least 20 years. Some people from New-Jersey, who had purchased land in this situation, it is said, after spending all their means in getting to it, have found too late that they have been imposed upon, and are now struggling by hard labor, to get money to take them back to their native state.



PREVENTION OF ACCIDENTS FROM BULLS.

WHEN we were at Mr. THOS. HILLHOUSE's the other day, looking at his stock, a fine young imported Durham bull was led out. That he might be seen to better advantage, he was let loose in the yard. He directly showed himself much inclined to display his activity and strength by pitching battle with somebody—still he did not seem to be really *vicious*, but merely wanted to display his prowess. But when the man went to put him into the stable, the bull gave him a *gentle* warning to keep his distance, by catching him on his horn and throwing him over his back! Fortunately the man was not seriously injured. On a second attempt being made to put the bull in the stable, he "showed fight" in earnest, and it was not till the tine of a pitchfork had been broken in his head, that he would yield ground an inch!

Bulls, like *every body else*, have a great desire to do as *they please*—and we find this disposition quite as strong in those whose propensities would lead them to do *wrong*, as in others—hence, for common safety, *all* animals should be placed under some restrictions, and these restrictions should be more or less rigorous, according as the disposition and character of the individual shall show to be necessary.

We here give a contrivance for the prevention of accidents from unruly bulls, which we think is the best thing of the kind we have seen.

It is copied from the Complete Grazier, and is thus described: The above engraving furnishes a good representation of a front view of the apparatus as affixed to the head of the animal. It consists of a straight piece of iron, stretching from horn to horn, perforated at each end so as to pass over the tips, and strongly fastened on the horns. On the center of this is riveted a *curved* bar of iron—or which is better, steel—bending upwards, which moves easily on the rivet, and has holes at each end containing the upper round link of a chain. These chains again unite in a strong iron or steel ring, which opens with a hinge and screw and passes through the bull's nose. The effect of this contrivance is, that if the bull should make a push forward, the curved bar will prevent any bad consequences, and if he move in the smallest degree to the right or left, the bar communicating by the chain with the ring in the nose, will bring him immediately to check.

Every bull should have a ring in the nose, and the best way to lead him is by a strong stick, like a hoe handle, with a hook and spring at one end, to be attached to the ring in the nose. The animal is thus kept at a proper distance from the person who leads him.

DAIRYING.

PHINEAS HARDY, near Luray, Jefferson co. in this state, keeps 49 cows. He made last year 14,000 lbs. cheese, and 2,000 lbs. butter. He rears his cows. His cows gave an average of 14 to 15 quarts per day, on pasture; in the best part of the grass season, the best of them give 20 quarts per day. He has tried a cross with the Durham breed, and is satisfied that it is an improvement; prefers the *half* bloods to those which have either more or less of the Durham; they are better milkers, keep easier, and hold out longer—that is, their constitutions are better. Mr. Hardy has taken several premiums on cheese, at our state and county shows.

DEMAND FOR LONG WOOL.

WE have great pleasure in laying before our readers the following letter from SAMUEL LAWRENCE, Esq. of Lowell, in answer to one we addressed him, enclosing samples of wool from some Leicester sheep, owned by Mr. HOWARD, associate editor of the Cultivator. It will be seen from this letter that rapid advances are making in this country in the manufacture of such goods as require long wool, such as is produced by the breeds of sheep known as Cotswolds, Leicesters, Linconshires, &c. and that the increasing demand for this kind of wool affords encouragement to the breeders of these sheep, which they have not heretofore enjoyed. It will be seen also, that Mr. S. expresses great confidence in the belief that the prospects of the wool grower are fully equal to those of any other branch of husbandry.

Lowell, Jan. 10, 1844.

EDITORS OF THE CULTIVATOR—My numerous engagements at the opening of the year, have prevented an earlier reply to your respected favor of the 28th ult.

I have examined the two samples of wool, and am of opinion that they are admirably adapted to combing purposes for the manufacture of *Mouslin de Laines*. The staple is long, strong and lustrous, qualities not desirable for felting purposes, especially the two latter. I judge these samples to be from Cotswold sheep, a breed which it is very desirable to propagate in this country, as the worsted business is just coming into existence. The secret of England's advance of all the world in the manufacture of worsted goods, lays in the fact of her possessing better breeds of sheep for the production of combing wools, and not from her superior skill in working them.

The worsted business in its various shapes, is to be of immense importance in this country, and it affords me sincere pleasure to be able to say to you that it has already been commenced in this state upon a liberal scale, by parties whose means and intelligence are a guaranty of its success. A great deal of talent and skill have been brought to bear upon this branch of industry, and if I am not greatly deceived, the time is near when old England herself will be astonished at our success. A number of hundred looms on mouslines are already in operation, and more in progress. In addition to the works already projected, a company is now being formed in Boston, with a capital of a million of dollars, for works on Mouslin de Laines, &c.

In reply to your inquiry about the kinds and quantities of wool used in the Middlesex mills, I have to say that we use about a million of pounds yearly, of such kinds as are considered in this country the choicest produced; say full blood Saxony, and Saxony mixed with Merino. We are very fastidious in the selection of our wools, both as regards the blood and condition; and in consequence, we are in the habit of paying prices which many manufacturers think absurd.

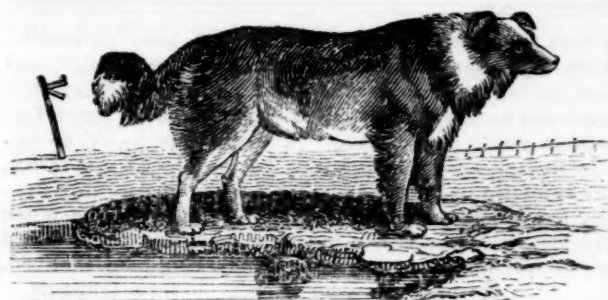
I am clearly of the opinion that no branch of agriculture promises better than the culture of wool, and I sincerely hope more attention will be given to it than has been paid for the last few years.

Yours,

SAM'L LAWRENCE.

DEVON COWS.

MR. C. P. HOLCOMB received the first premium of the New Castle (Del.) Co. Ag. Society, for a Devon cow. "The result of 12 weeks trial with this cow, gave 174 lbs. 12 oz. butter, averaging 14 lbs. 9 oz. per week; the highest product in any one week being 19 lbs., and the lowest 12½ lbs. The week she made 19 lbs., she made one half of it the last three days of the week. Her feed the first part of this time was hay, with dry oat and corn meal mixed; subsequently this was changed to slop—two buckets a day was regularly given her, containing about two quarts of corn meal and as much wheat bran, mixed in a bucket of warm or tepid water, with a little salt. The week of her great trial in June, she was fed on three gallons of meal a day, at three feeds, mixed as above. She had a good run of pasture, and was also for a time fed on green oats, and again with corn fodder that had been sown broadcast."



THE SHEPHERD'S DOG.—(Fig. 00.)

WHERE sheep husbandry is practiced on a large scale, this dog performs so important a part, that some notice of his qualities cannot be deemed irrelevant. The variety which is above delineated, is found chiefly in the extensive sheep walks of the northern part of England and in Scotland, where the purity of the breed appears to be preserved in the greatest perfection. Its docility and sagacity, indeed, surpass those of every variety of the canine race. Obedient to the voice, looks, and gestures of his master, he quickly perceives his commands and instantly executes them. A well trained dog of this kind, is, to a shepherd, an invaluable acquisition. The faithful animal anxiously watches the flock, keeps them together in pasture, from one part of which it conducts them to another, and if the sheep are driven to any distance, he will infallibly confine them within the road, and at the same time prevent any strange sheep from mingling with them.

In keeping sheep on the large prairies of the west, or on extensive hills and mountainous ranges of country, this kind of dog would be found very serviceable. Those who wish to see a specimen of their sagacity, will find one in possession of Mr. Sotham, of "Hereford Hall," which will perform about all that is attributed to any of the species.

FARM OF GEO. GEDDES, ONONDAGA CO. N. Y.

Product and Expense of Cultivating Twenty Acres, for Twelve years.

WE consider the following Farm Report of Mr. Geddes, worthy of notice on several accounts. It furnishes an example of the debt and credit system which every farmer should keep with his several fields, and also the ease with which great productiveness is kept up in a naturally well constituted soil. We had the pleasure last autumn of inspecting Mr. Geddes' beautiful farm, his well constructed barns, stables, &c.; his machinery, worked by water, for raising water to his yards and buildings, sawing his wood, and for other mechanical purposes; and he called our attention in particular to the field, the course of cultivating which he has here described. It lies on the gypseous shales at the base of the Onondaga limestones, and is a deep sandy loam, easily worked, and containing evidently both lime and gypsum in considerable quantities. In its geological position and chemical constitution, it appears to resemble those fertile soils, the analysis of which is given by Sprengel, and one of which had been constantly cropped for 160 years. Few fields of corn we have seen the past season, showed a finer growth than that of this field, but it was much injured by the premature frost of September. To the excellent chemical and mechanical condition of the soil must be attributed its continued fertility, materially aided no doubt, by the clover and plaster used upon it. It should be understood that Mr. Geddes did not offer his farm for examination by the County Committee, but it was visited by them, for the pleasure which every good farmer must feel in witnessing the improvements in agriculture, conducted under the supervision of a man of wealth and intelligence.

Messrs. Brown, Ellis and Cleaveland—Having been absent from home when you visited my farm last summer, to examine the growing crops, I take this mode of giving you such information in relation to the mode of culture, and the results obtained, as I think will be necessary to enable you to judge correctly in the matter.

The land upon which you saw the corn growing, had been pastured two years, and was manured slightly this spring with straw that had been trampled under foot in the barn yard last winter. The manure was drawn on the ground before plowing, and plowed under as well as could be done by one pair of horses before one of the plows known as the Nourse and Ruggles' plow, marked "Sward C.;" the plow going about five inches deep. The ground was then rolled and harrowed. The corn was planted the eleventh and twelfth days of May; the hills three feet apart from center to center, both ways, averaging about five stalks in the hill. As soon as the corn came up it was plastered, and in due time hoed twice. The implement used to prepare the ground for the hoe both times, was a cultivator having steel teeth, which was passed once in each row both ways of the field.

This mode of culture, made the ground, as you must have observed, very clean. Here permit me to say, that ground that is free from stumps and stones, and is plowed well, rolled and thoroughly harrowed, will be clean when the corn is harvested, if it is faithfully hoed twice, unless some very bad weed is to be subdued. Three times cultivating under the circumstances above supposed, will in my opinion, do more injury in breaking the corn down, and trampling it under foot, than benefit. I wish to be understood when I speak of hoeing corn, I mean that every plant besides the corn, is to be cut up or buried, and the work in all respects faithfully performed.

The season will not allow my corn to be harvested in time to report the quantity to you before the annual meeting of the Society. It is now cut up and in stooks.

I had at the time of your visit, a field of barley growing, that may have attracted your attention. It has been carefully measured and weighed, and the ground upon which it grew accurately measured. It produced by measure, forty-nine and one-third bushels to the acre; by weight, fifty-one and a half bushels to the acre, and a small fraction over.

I propose to give you the history of the ground upon which this crop grew, as showing what our best lands are capable of doing, even under ordinary management.

Forty-five years ago, this land was cleared of a moderate growth of oak and hickory timber, interspersed with wild cherry, butternut, box wood, aspen, &c. and sown to wheat. The course of tillage for the first thirty-three years, I know little of, save that barn yard manure has never been used except once, and then in a very small quantity, and on only a small part of the field. Clover and plaster, however, have been used freely from the earliest period that they could be obtained in this country.

Twelve years ago, I came into possession, the land being then covered with clover. The course pursued, and the results obtained from that time, I give you below:

<i>First Year</i> —I summer fallowed, receiving from the land only the pasture, during the fore part of the season, say four weeks, a cow being kept upon each acre at 25c. per week,.....	\$1-00
<i>Second Year</i> —Harvested wheat. The crop was sown early, and grew large in the fall, and the snow was very deep, and remained on the ground till late, and the crop was so injured that probably not more than five acres were harvested. One hundred bushels only was obtained, it being at the rate of five bushels to the acre on the whole piece, at one dollar per bushel would give per acre,.....	5-00
<i>Third Year</i> —Put in corn, and had by measure, a little over sixty bushels per acre, sold at 50c. per bushel,.....	30-00
<i>Fourth Year</i> —Corn again, estimated at fifty bushels per acre, at 50c.	25-00
<i>Fifth Year</i> —Oats, measured seventy bushels per acre, at 37½c.	26-25
<i>Sixth Year</i> —Harvested wheat, put in after oats, measured twenty bushels per acre, and sold at \$1-50..	30-00
<i>Seventh Year</i> —In pasture. An acre will keep one cow for six months, at 25c. per week,.....	6-50
<i>Eighth Year</i> —Sowed oats, measured sixty-five bushels per acre, at 37½c.	24-37
<i>Ninth Year</i> —Wheat after oats, 19½ bushels per acre, sold at \$1-31½.....	25-67
<i>Tenth Year</i> —Summer fallowed and pastured, say one cow 4 weeks, at 25c.	1-00
<i>Eleventh Year</i> —Harvested wheat, injured by rust, fifteen bushels per acre, sold at \$1-00.....	15-00
<i>Twelfth Year, 1843</i> —Barley, fifty-one and a half bushels per acre, sold at 37½c.	19-31

Total value of product of one acre for twelve years,.... \$209-30

From this sum is to be deducted the cost of cultiva-

tion, seed, plaster, and clover. No account has been kept of these items, but practical men, like yourselves, can judge of the estimate I herewith submit.

You will recollect that this land is free from stone, stumps, and every thing that can obstruct the plow, and that clay and sand are so mingled, that it is of very easy cultivation.

First Year—Summer fallowed.

Second Year—The first crop, wheat was harvested, and cost as follows:

Breaking up one acre, with one span of horses, two-thirds of a day,	\$1.33
Harrowing same one-fifth of a day,	40
Cross plowing same twice, one day,	2.00
Harrowing same three times, half a day,	1.00
Seed wheat, and sowing same,	1.50
Harvesting 20 bushels of wheat to the acre, and drawing same,	1.50
Threshing 20 bushels of wheat, at 10 cts.	2.00
Cost of first crop, per acre,	\$9.73

This crop being a failure, the charges above for harvesting and threshing are high.

Third Year—The second crop, corn, cost—

Plowing and harrowing one acre, one day,	\$2.00
Marking both ways,	25
A man one day, planting one acre,	75
" " hoeing " "	75
" " " " second time,	75
The cost of cultivating one acre for both hoeings,	50
A man three days harvesting at 75 cts.	2.25
Seed corn, and drawing corn to crib,	25
Cost of second crop per acre,	\$7.50

Fourth Year—Third crop, corn, cost same as second,

Fifth Year—Fourth crop, oats, cost—

Plowing one acre, half a day,	\$1.00
Harrowing in seed, quarter of a day,	50
Three bushels of seed oats, at 37½ cts.	1.12
Harvesting one acre,	1.25
Threshing seventy bushels of oats, at 4 cts.	2.80
Cost of fourth crop per acre,	\$6.67

Sixth Year—Fifth crop wheat, put in after oats, cost—

Twice plowing one acre, one day,	\$2.00
Harrowing one acre, quarter of a day,	50
Seed, and sowing,	2.00
Harvesting and drawing into barn,	1.50
Threshing 20 bushels of wheat, at 10 cts.	2.00
Cost of one acre of fifth crop,	\$8.00

Eighth Year—Sixth crop, oats on clover sod, cost—

Plowing one acre,	\$1.33
Harrowing in oats, quarter of a day,	50
Three bushels of seed oats, at 37½ cts.	1.12
Harvesting one acre,	1.25
Threshing 65 bushels of oats, at 4 cts.	2.60
Cost of one acre of sixth crop,	\$6.80

Ninth Year—Seventh crop, wheat sown after oats, cost—
See fifth crop,

Eleventh Year—Eighth crop, wheat, summer fallowed, cost—See first crop,

Twelfth Year—Ninth crop, barley, 1843, cost—

Plowing one acre of sod,	\$1.33
Harrowing seed quarter of a day,	50
Rolling the ground after sowing,	25
Three bushels of seed, at 50 cts.	1.50
Harvesting,	1.25
Threshing 51½ bushels, at 6 cts.	3.09
Cost of one acre of ninth crop,	\$7.92

During these twelve years, clover was sown four times, and plaster six times, costing in all about,

The total value of products of one acre, is

The total cost of production for an acre, is

The value of products over cost of production,

Which divided by the number of years, gives for the annual profits,

In this estimate, nothing has been charged for fences or taxes. On the other side of the account might have been credited to the land, the value of pasture after the wheat had been harvested; the straw too was worth something, and the cornstalks; these three items will more than balance the fencing and taxes.

No very large crop has been raised during the whole time, unless the barley should be so considered. The

prices for which I have sold, have not been extraordinary, and I have suffered one almost entire failure, and one partial failure of a wheat crop. No particular skill has been applied, nor is there any particular good fortune to credit the result to. The soil alone, by its native energy and good qualities has produced the result, the last crop of the series being the heaviest of all. Production has been pushed more with a view to see when the soil would be exhausted, than how fine crops could be obtained, or how the most money could be realized.

Respectfully your friend, GEO. GEDDES.
Camillus, N. Y., Sept. 28, 1843.

MERCER OR CHENANGO POTATOE.

WE have heard some complaints within a few years, that this potatoe was not as good as it used to be, or that it had degenerated. The following extract which we make from a well written communication in the *Maine Farmer*, agrees so well with our experience and opinions, that we feel a pleasure in laying it before the readers of the *Cultivator*. The remedy he proposes will not fail.

"But has the Chenango degenerated? We answer yes. The Chenango when first introduced into this state, was a mixture of two distinct varieties; one kind is always very good, and always produces its like, while the other is comparatively bad, and yields after its kind. Every body knows, for every body has eaten Chenangoes, that some of them when cooked, are white, dry, and good flavored, while others are very dark blue through the whole potatoe, watery and strong flavored. The light kind is always fit for the table, and the dark, never. The light kind are the best formed and yield the best. The dark kind does not ripen so early as the light. In the raw state, it is difficult, if not impossible, to distinguish in all cases the one from the other, but when cooked or cut, they are easily distinguished. The dark variety has increased upon the light, and being unfit for the table, has caused the Chenango to be less esteemed. As we planted this year but two acres, we concluded to improve the Chenango for our own use; and accordingly when cutting our seed, we rejected the dark kind; and the barrel we send is a fair sample of the produce. The result is as we expected, and is satisfactory. We now know the Chenango can be so improved in a single season, as to be as perfect a variety as ever grew; that is, that every potatoe of suitable size to cook, will be good when cooked."

IMPROVED VARIETY OF RICE.

THE South Carolina Temperance Advocate, publishes the proceedings of the State Ag. Society of that state, among which we notice that mention is made of a new variety of rice, called the "big grained rice." It was first discovered in 1838. A person found a part of an ear lying in the barn yard during the threshing season, and from its peculiarity was induced to preserve it. Subsequent experiments have proved it to be unusually productive. Mr. Joshua John Ward, states that in 1840 he planted not quite half an acre with this seed, which yielded 49½ bushels of clean winnowed rice. In the year 1842, he planted four hundred acres with this seed, and being so perfectly satisfied with both the product and the improved quality of the same, he was induced in the succeeding year (1843,) to sow with it his entire crop. The first parcel, when milled, consisting of eighty barrels, netted fifty cents per cwt. over the prime new rice sold on the same day.

Mr. Ed. T. Heriot, states that he planted of this seed in 1839, two fields, one of 15, the other 10 acres, which yielded 73 bushels per acre. The average crop from the same fields had been only 33 bushels per acre.

KNITTING MACHINES.

A correspondent inquires where the rotary knitting machines may be had? Can any one answer?

A meeting was recently held at Burlington, New Jersey, at which it was resolved to form a State Horticultural Society.

NEW-YORK STATE AGRICULTURAL SOCIETY.

ANNUAL MEETING.

THE annual meeting of the New-York State Ag. Society for 1844, was held at the Geological Museum, Albany, on the 17th of January,—the President of the Society, JAMES S. WADSWORTH, Esq. in the chair.

The first business attended to was the admission of members—89 being admitted, paying \$1.00 each.

The Report of the Committee on Field Crops, consisting of Messrs. HILLHOUSE, BEMENT and HOWARD, was then read as follows:

The Committee to whom was referred the examination of the statements of the competitors for premiums offered by the N. Y. State Ag. Society, on "Field Crops," having attended to that duty, respectfully offer the following Report:

BARLEY.

1. To Bani Bradley, East Bloomfield, \$10. Product, 140 bushels 21 lbs. from two acres and 21 rods.

2. To George Geddes of Camillus, \$5. Product, 51 82-100ths bushels, average on five acres.

3. To Wm. Wright of Vernon, vol. of Transactions. Product, 82 bush. 22 lbs. on two acre.

INDIAN CORN.

There were three competitors for the premiums on Indian corn, neither of whom, the committee state, had sufficiently complied with the requisitions of the Society to justify the award of a premium.

WINTER WHEAT.

1. To N. S. Wright, Vernon, \$10. Product, 80 bush. 55 lbs. on two acres.

2. To Wm. Wright, Vernon. Product, 73 bush. 12 lbs. on two acres.

SPRING WHEAT.

1. To Uri Beach, West Bloomfield, \$10. Product, 75½ bush. on a fraction over two acres.

RYE.

1. To Geo. McGeoch, Jackson, \$10. Product, 77 bush. on two acres.

PEAS.

1. To Geo. K. Smith, Utica, \$10. Product, 46 bush. 20 quarts, on one acre and 14 rods.

2. To Myron Adams, East Bloomfield, \$5. Product, 43¼ bush. per acre.

OATS.

1. To Joseph F. Osborn, Port Byron, \$10. Product, 109¼ bush. on one acre, 11 rods and 90 links.

2. To David Jones, Kendall, \$5. Product, 209 bush. 11 lbs. on three acres and 11 rods.

RUTA BAGAS.

1. To H. S. Randall, Cortlandville, \$10. Product, 950 bush. on one acre and two rods.

CARROTS.

1. To Wm. Risley, Fredonia, \$10. Product, 1,350½ bush. on one acre.

POTATOES.

1. To H. D. Grove, Hoosick, \$10. Product, 518 bush. on one acre and 72 rods.

ESSAYS.

The President then read the Report of the Committee on Essays, from which it appeared that the prize for the best Essay

1. On the Diseases and Insects injurious to the Wheat Crop, was awarded to JOHN J. THOMAS of Macedon, Wayne county.—\$20.

2. On the Varieties and Culture of Wheat, to RAWSON HARMON, Jr. of Wheatland, Monroe county.—\$20.

3. On the Introduction and Culture of new Agricultural Products, to JOHN J. THOMAS, of Macedon, Wayne county.—\$20.

REPORT OF THE COR. SECRETARY.

H. S. RANDALL, Esq. Cor. Sec'y, not having prepared his Report, made a brief statement, from which it appeared that his efforts have been continued through the past year, with untiring zeal in behalf of the cause.

TREASURER'S REPORT.

The Treasurer, E. P. PRENTICE, Esq. read his annual Report, from which it appeared that there was in his hands at the last annual meeting, the sum of \$1,843 92

Received at annual meeting from 69 members, 69 00

Of Joseph Fellows, Geneva,.....	100 00
Of James Wadsworth, Geneseo,	50 00
Of James S. Wadsworth, "	50 00
Of W. W. Wadsworth, "	25 00
Of Wm. P. Van Rensselaer, Albany,....	25 00
Of J. M. Sherwood, Auburn,.....	22 00
Of J. B. Murray, Mt. Morris,.....	10 00
Of R. L. Pell, Pelham,	10 00
Of A. Ayrault, Geneseo,	7 00
Of Edmund Kirby, Brownsville,.....	5 00
Of Orville Hungerford, Watertown,	5 00
Of C. H. Carroll, Groveland,	5 00
Subscriptions at Rochester,.....	278 00
Monroe Co. Ag. Society,.....	328 00
589 Memberships at annual Fair,.....	589 00
Receipts at gate in sums less than \$1,...	1,606 78
From the State Treasury,	700 00
For interest on funds,.....	92 99
Various other sources,.....	87 25

\$5,906 94

Advanced by Treasurer,..... 139 63

\$6,046 57

The payments from the Treasury during the year were as follows:

For premiums, expenses, &c.....	\$2,956 57
Invested in Albany City stock,.....	3,000 00
Premium on do.	90 00

\$6,046 57

Mr. DENNISTON of Orange, introduced a resolution directing the appointment of a Committee of one from each Senate district, by the chair, to report the nomination of officers for the ensuing year, which, at the suggestion of Mr. BOCKEE, was increased to three from each district.

Mr. RANDALL moved as an amendment to Mr. D.'s resolution, that the Committee consist of one person from each county represented, to be appointed by the delegation from the several counties, and that this committee, in addition to nominating officers, report on the place for holding the next Cattle Show.

This resolution and the amendments proposed, drew out a debate of considerable length, in which Messrs. Denniston of Orange, Lott of Kings, Johnson and Seymour of Oneida, Hogeboom of Columbia, Randall of Cortland, Nott of Albany, and several other gentlemen whose names we do not recollect, participated.

Mr. DENNISTON finally accepted the proposition to amend his resolution so as to refer to the Committee the question of selecting the place for the Fair, in which shape it passed, and the following gentlemen were appointed the Committee to nominate officers and to select the place for holding the next Cattle Show:

First District—Messrs. Lott and Rappelye of Kings, and F. S. Williams of New-York.

Second District—Messrs. Denniston of Orange, Bockee of Dutchess, and Youngs of Queens.

Third District—Messrs. Hogeboom of Columbia, Vail of Rensselaer, and Prentice of Albany.

Fourth District—Messrs. Cheever of Albany, Delavan of Saratoga, and Clark of Washington.

Fifth District—Messrs. Kirby of Jefferson, Enos of Madison, and Seymour of Oneida.

Sixth District—Messrs. Mack of Tompkins, Collier of Broome, and Faulkner of Livingston.

Seventh District—Messrs. Sherwood of Cayuga, Rhoades of Onondaga, and Randall of Cortland.

Eighth District—Messrs. Lee of Erie, Follett of Genesee, and Backus of Monroe.

Mr. RANDALL submitted the following, as a proposed amendment to the Constitution:

Resolved, That the Presidents of County Ag. Societies shall be ex-officio members of the Executive Board of the N. Y. State Agricultural Society.

On motion of Dr. BEEKMAN,

Resolved, That the President of the Agricultural Society of the State of New-York, be authorised to appoint three individuals, members of the society, whose duty it shall be for each to read an essay on some subject con-

nected with agriculture, and that the essays be read at the meeting of the Society in January next.

On motion of Mr. O'REILLY, resolutions were adopted—1. That a committee of seven be appointed to compile and make arrangements for the publication of volumes from the Prize Essays of the Society, of suitable size for Common School Libraries—2d. That a premium of \$100 be offered for the best series of Essays "on the importance of scientific knowledge in prosecuting successfully the ordinary pursuits of Agriculture"—said series to be published also in one or two volumes suitable for the School District Library, the author being entitled to the copy-right. [The Committee subsequently appointed by the newly elected President, (Dr. Beekman,) in reference to these publications, consists of the Hon. John Greig of Ontario, Gov. Seward of Cayuga, Lieut. Gov. Dickinson of Broome, John A. King of Queens, James S. Wadsworth of Livingston, Judge Savage of Washington, and Henry O'Reilly of Albany.]

The Committee on nomination of officers, &c. reported that they had agreed upon *Poughkeepsie*, as the place for holding the next Cattle Show of the Society.

They reported a nomination of officers, which, after an amendment, was accepted as follows:

JOHN P. BEEKMAN, Columbia, *President*.

Vice Presidents.

1st Dist.—JAMES LENNOX, New-York.

2d Dist.—THOMAS L. DAVIES, Poughkeepsie, Dutchess.

3d Dist.—JOEL B. NOTT, Guiderland, Albany.

4th Dist.—JOHN SAVAGE, Salem, Washington.

5th Dist.—EDMUND KIRBY, Brownsville, Jefferson.

6th Dist.—GEORGE J. PUMPELLY, Owego, Tioga.

7th Dist.—H. S. RANDALL, Cortland Village, Cortland.

8th Dist.—RAWSON HARMON, Jr. Wheatland, Monroe.

BENJAMIN P. JOHNSON, Rome, *Cor. Secretary*.

HENRY O'REILLY, Albany, *Rec. Secretary*.

THOMAS HILLHOUSE, Albany, *Treasurer*.

Additional Members of the Executive Committee—George Wilkinson, Poughkeepsie; J. M'D. McIntyre, Albany; George Vail, Troy; Alexander Walsh, Lansingburgh; Joel Rathbone, Albany.

[The nominating Committee reported the name of James S. Wadsworth for re-election as President, and Luther Tucker for re-election as Recording Secretary—both of which nominations were unanimously approved by the Society. But both of the individuals named, were compelled, by other avocations, to decline a continuance in their respective offices. E. P. Prentice, who was on the nominating committee, declined a re-nomination as Treasurer, which was warmly pressed upon him.]

The Society assembled in the evening at the Capitol, where the newly elected officers took their respective stations. After some brief remarks from the President in reference to the duties which he had just been elected to discharge,

The Annual Address was delivered by Mr. KNEVELS of Dutchess county. The address was replete with facts and arguments illustrative of the importance of Agriculture in all its branches, and in its varied connexions; and was listened to with marked attention during the hour and a half which its delivery occupied.

In addition to members of the Society, the Assembly Chamber was filled with other citizens, embracing various distinguished friends of agriculture from different parts of the state. Among them were Ex-President Van Buren, Lt. Gov. Dickinson, several of the State officers, members of the Legislature, &c.

Resolutions were passed, tendering the thanks of the Society to Mr. WADSWORTH, President,—to Mr. PRENTICE, Treasurer, and to Messrs. RANDALL and TUCKER, Secretaries of the Society, for the able and faithful manner in which they had discharged the duties devolving upon them while occupying those stations.

On motion of Major DAVEZAC of New-York,

Resolved, That the thanks of the Society be tendered to Mr. J. W. Knevels for the able and instructive address delivered by him this evening, and that he be requested to furnish a copy for publication.

On motion of Mr. S. SMITH of Putnam,

Resolved, That a committee of three persons be ap-

pointed to petition the Legislature to extend the operation of the existing law for the promotion of Agriculture, and for other purposes.

Mr. JOHN DICKSON of Ontario county, gave notice that a motion would be made at the next annual meeting of this Society, to amend the Constitution thereof, so as to give to the Society, instead of the Executive Committee, the power of fixing the place where the Annual Fairs are to be held.

On motion of Mr. DANIEL LEE of Erie,

Resolved, That this Society regards the establishment of an Agricultural Institute and Pattern Farm in this state, where shall be taught thoroughly and alike, the Science, the Practice, and the Profits of good husbandry, as an object of great importance to the productive agriculture of New-York.

The Society then adjourned.

AGRICULTURAL READERS.

IN the early part of our experience as publisher of an agricultural paper, we found that the readers of such journals could be divided into two classes, one of which read with profit, the other with very little if any. Of course we do not include in either of these classes, those farmers who already know every thing, despise all agricultural reading, and treat the idea of any improvement in husbandry with the most profound contempt. The number belonging to this class is much reduced, but specimens are occasionally met with.

Farmer A. belongs to the class of readers that receive and peruse agricultural papers with little profit. The reason is, he does not sufficiently exercise his own judgment in reference to the details of farming. He reads a statement that such a farmer was eminently successful in the cultivation of such a crop; the growing or fattening of such or such an animal; or the management in general of a farm on the principles of rotation; and he determines at once to do the same. He does not stop to inquire whether his soil is suited to the particular crop he wishes to grow, whether it is too wet or too dry, too light or too heavy, rich or poor, but pursuing the course pointed out by the successful farmer, he miserably fails in his crop, or his animals, and frequently throws on the publication, or its correspondent, the blame which fairly belongs to himself.

Farmer B. on the contrary, is one of a class of readers that find a decided profit in the perusal of agricultural papers. He takes the same papers as A., but wholly escapes the mistakes into which A. is constantly falling. The reason is to be found in the fact that he exercises his judgment in managing his farm; and is fully aware that a course of husbandry that would be successful on one kind of soil, or one particular location, would be ruinous on another. Because a great crop, or fine animals, have been produced under certain circumstances, he does not go on to infer that they will be so in all, and it is in this discrimination and adaptation, that the cause of his success is found. He reads, compares, reflects, and decides whether a course is suitable for him, his soil, or circumstances, before he adopts it. His agricultural reading furnishes him the means of doing this correctly, and in that he finds a great advantage.

Agricultural publications are not intended to supersede the use of the judgment in matters of practice, among those who receive them; their great office is to enable the farmer to judge correctly as to the proper course for him to pursue; to bring to his notice all improvements in husbandry and agricultural implements, that he may choose wisely for himself; to show what has been done by others, and the way it has been done, that if in the same circumstances, and it is desirable, he may do so too; and to excite to improvement by showing it is practicable and profitable. The farmer must do as do men in other cases, obtain all the light and information possible by reading, and then reflect, reason, decide, and practice for himself.

THE range of earthly good is narrow and soon trodden; after a short time there is no variety, and the enjoyment is without hope.

ANNUAL EXHIBITION

Of the N. Y. S. Ag. Society, to be held at Poughkeepsie, September, 18 and 19, 1844.

List of Premiums for 1844.

MANAGEMENT OF FARMS.

For skill and improvement in the management of a farm, taking into view the land, stock and produce, with all the appendages,

First premium, a gold medal—Second and third, silver medals.

No premium will be awarded unless an accurate description of the farm and statement of the crops, &c. with all the expense of the management and profit of the farm, is furnished. These premiums will be awarded only to those whose farms are improved in a manner that renders them examples worthy of imitation.

ESSAYS FOR PUBLICATION IN THE "TRANSACTIONS."

For the best series of Essays on the importance of scientific knowledge in prosecuting successfully the ordinary pursuits of Agriculture, \$100

For the best essay on Farm Management, including all the details connected with the successful management of a farm, \$20

For the best essay on the Rotation of Crops adapted to the climate of this state, \$20

For the best essay on Subsoil Plowing, with the results of actual experiments in the state of New-York, 20

For the best essay on the Culture and Manufacture of Silk, 20

For the best essay on the cultivation of the Apple, for exportation as well as domestic use, 20

EXPERIMENTS AND IMPROVEMENTS IN AGRICULTURE.

Turning under Green Crops.

For the most satisfactory experiment of turning under green crops as a manure, on not less than one acre of land, with a detailed statement of the whole process in writing, \$10—For the second best, 2 vols. Trans.

Preparation and Application of Manures.

Best experiment in the preparation and application of manures, with a detailed statement of the expense and all matters connected with it, \$10.

Improvement of Agricultural Implements.

To the person who shall exhibit at the next Fair, any new or improved agricultural implement of his own invention, which shall in the opinion of the committee merit a premium, a Silver medal.

Proof must be given of the work performed by the implement previous to its exhibition, and of its having been used and approved by some practical farmer. To be open for competition to any citizen of the United States.

Comparative value of Crops as food for Cattle.

For the most satisfactory experiment upon a stock of cattle not less than four in number, in ascertaining the relative value of the different kinds of food used, as compared with hay, with a detailed account of the fodder used, and the expense of raising and feeding the same. The experiments to be made in three winter months, or whenever satisfactory experiments can be made, \$20—Second best, 2 vols. Trans.—Third best, Diploma.

Experiments in Indian Corn.

A premium of \$25 for the best, \$15 for the second best, and \$10 for the third best conducted series of experiments in the cultivation of Indian corn. Not less than one acre of ground to be planted.

The experiments to be made with a view of ascertaining what are the peculiar laws relating to that crop—particularly how thick it should be planted, how the plants should be distributed on the ground—whether in hills, drills or otherwise, what kind of manure, and how it should be applied, the manner of cultivation, and the kind of corn planted, to be particularly stated. The cost of each process, the amount of corn raised by each of the different modes of culture, and the relative profits, to be accurately and minutely stated in the report to the committee.

Irrigation.

Best conducted experiment in the flooding and irrigation of lands, \$10.

Sheep.

Best managed flocks of sheep, including particular statements of the breed, expense of keeping, increase, amount of wool, value, &c. \$12, or a Gold medal.

Dairy.

Best managed dairy, with a detailed statement of expense, and every thing connected with the management as well as profits of the same, \$12, or a Gold medal.

For the greatest quantity and best quality of butter produced on any farm, from a given number of cows in 30 days the present year, with a particular statement of the method of making and preserving the same, with a satisfactory account of the manner in which the cows have been fed, and the general management of the milk and butter—a Silver medal.

CATTLE.

CLASS I.—Best of any breed.

Best Bull, 3 years old, \$20 | Best Cow, 3 years old, \$20
Best Bull, 2 years old, 15 | Best Cow, 2 years old, 15
Best yearling Bull, 10 | Best yearling Cow, 10
Best Bull calf, 6 | Best heifer calf, 6

CLASS II.—Durham Cattle.

Best Bull, 3 years old, \$15 | Second best, \$10
Third best, Diploma.
Best Bull, 2 years old, \$10 | Second best, \$5
Third best, Diploma.
Best yearling Bull, \$10 | Second best, \$5
Third best, Diploma.
Best bull calf, \$5 | Best Cow, 3 years old, \$15
Second best, Diploma. | Second best, \$10
Third best, Diploma.
Best Heifer, 2 years old, \$10 | Second best, \$5
Third best, Diploma.
Best yearling Heifer, \$10 | Second best, \$5
Third best, Diploma.
Best heifer calf, \$5 | Second best, Diploma.

CLASS III.—Herefords.

Best Bull, 3 years old, \$15 | Second best, ... 2 vols. Trans.
Third best, Diploma.
Best Bull, 2 years old, \$10 | Second best, ... 2 vols. Trans.
Third best, Diploma.
Best yearling Bull, \$6 | Second best, vol. Trans.
Third best, Diploma.
Best bull calf, \$5 | Best Cow, 3 years old, \$15
Second best, Diploma. | Second best, ... 2 vols. Trans.
Third best, Diploma.
Best Heifer, 2 years old, \$10 | Second best, ... 2 vols. Trans.
Third best, Diploma.
Best yearling Heifer, \$6 | Second best, vol. Trans.
Third best, Diploma.
Best heifer calf, \$5 | Second best, Diploma.

CLASS IV.—Devons.

Best Bull, 3 years old, \$15 | Second best, \$10
Third best, Diploma.
Best Bull, 2 years old, \$10 | Second best, \$5
Third best, Diploma.
Best yearling Bull, \$10 | Second best, \$5
Third best, Diploma.
Best bull calf, \$5 | Second best, Diploma.
Best Cow, 3 years old, \$15 | Second best, \$10
Third best, Diploma.
Best Heifer, 2 years old, \$10 | Second best, \$5
Third best, Diploma.
Best yearling heifer, \$10 | Second best, \$5
Third best, Diploma.
Best heifer calf, \$5 | Second best, Diploma.

CLASS V.—Ayrshires.

Best Cow, \$15 | Second best, \$10

CLASS VI.—Crosses of Native and Improved.

Best Cow, 3 years old, \$12 | Best Heifer, 2 years old, .. \$9
Second best, 8 | Second best, 6
Third best, vol. Trans. | Third best, vol. Trans.

CLASS VII.—Native Cattle.

Best Cow, 3 years old, \$12 | Best Heifer, 2 years old, .. \$9
Second best, 8 | Second best, 6
Third best, vol. Trans. | Third best, vol. Trans.

CLASS VIII.—Dairy Cows of any breed.

For the best Dairy Cow, from which shall have been produced in thirty successive days, the greatest quantity of butter—quality as well as quantity considered—which shall be exhibited at the time, \$15
For the second best, \$10 | For the third best, .. Diploma.

The manner of feeding the cow, the management of the milk, and the method of making the butter, with the time it was made, the breed of the cow, if known, and the time after calving, must all be accurately stated in writing. The cow and the butter to be exhibited at the time, with certificates from the person or persons who milked, managed the cream, and prepared the butter.

Working Oxen and Steers.

Best, over 4 years old, \$15 | 7 third best, vol. Trans.
Second best, 10 | Fourth best, Diploma.
Best 3 yoke of oxen or steers 2 yrs old, belong to 1 person, \$15
Second best, \$10 | Third best, Diploma.
Best ten yoke of oxen from any one town, \$20
Best yoke of steers, 3 yrs. \$15 | Second best, \$10
Third best, Diploma.

[In awarding these premiums, particular reference will be had to the matching, training and docility of the animals, as well as their general appearance.]

Best yoke of steers, 2 yrs. \$8 | Second best, vol. Trans.
Third best, Diploma.
Best yoke of steers, 1 yr. \$10 | Second best, Diploma.

Fat Cattle.

Best yoke, \$20 | Second best, \$15
Third best, \$10.
Best fat ox, \$15 | Second best, \$10
Third best, vol. Trans.
Best fat cow or heifer, \$15 | Second best, \$10
Third best, vol. Trans.

□ A fat ox taking a premium as one of a pair, cannot compete singly for another premium.

HORSES.

Best Stallion, 4 years old, \$20	Best breeding Mare,..... \$20
Second best,..... 10	Second best,..... 10
Third best,..... vol. Trans.	Third best,..... Diploma.
Fourth best,..... Diploma.	Best Mare, 3 years old, \$10
Best Stallion, 3 years old, \$15	Second best,..... vol. Trans.
Second best,..... 10	Third best,..... Diploma.
Third best,..... Diploma.	Best pair matched farm, \$10
Best pair matched,..... \$10	Second best,..... vol. Trans.
Second best,..... 2 vols. Trans.	Best pair market horses, \$10
Third best,..... Diploma.	Second best,..... vol. Trans.
Best gelding horse,..... \$10	Second best,..... vol. Trans.

The variety of horse which possesses size, strength and endurance for field labor, combined with that action which qualifies for the carriage or saddle—in short, the "horse of all work"—is probably the most profitable class which our farmers can now engage in rearing; and to such, therefore, will the preference of the Society be given. Horses taking premium in pairs, cannot compete singly for the premium for geldings.

SHEEP.

CLASS I.—Long Woolled.

Best buck,..... \$10	Best ewe,..... \$10
Second best,..... 5	Second best,..... 5
Third best,..... Diploma.	Third best,..... Diploma.

Best pen of five lambs, \$5.

CLASS II.—Middle Woolled.

Best buck,..... \$10	Best ewe,..... \$10
Second best,..... 5	Second best,..... 5
Third best,..... Diploma.	Third best,..... Diploma.

Best pen of five lambs, \$5.

CLASS III.—Fine Woolled.

Best buck,..... \$10	Best ewe,..... \$10
Second best,..... 5	Second best,..... 5
Third best,..... Diploma.	Third best,..... Diploma.

Best pen of five lambs, \$5.

CLASS IV.—Fat Sheep.

Best,..... \$10	Second best,..... \$5
Third best,..... vol. Trans.	

Applicants for the premiums on fat cattle and sheep, must furnish statements of the manner of feeding the animals, and the kind, quantity and cost of the food.

The term "long woolled" is designed to include the Leicesters, Lincolns, Cotswolds, and all the English varieties of sheep which furnish the quality of wool suitable for combing—the "middle woolled" includes the South Down, the Norfolk, Dorset, Cheviot, Native, &c.—the "fine woolled" includes the Spanish and Saxon varieties of the Merino and some of their crosses.

SWINE.

Best Boar, over 10 months, \$10	Best Sow,..... \$10
Second best,..... 5	Second best,..... 5
Third best,..... Diploma.	Third best,..... Diploma.
Best lot of pigs under 10 months, not less than 4 in number, \$5	
Second best, Diploma.	

In awarding premiums on hogs, reference will be had not merely to size or present condition, but that proportion between bone and meat which promises the greatest value from the least amount of feed.

FARM IMPLEMENTS.

Best plow,..... \$15	Best cultivator,..... \$5
Second best,..... Silver medal.	Second best,..... Diploma.
Third best,..... Diploma.	Best drill barrow,..... 5
Best subsoil plow,..... \$10	Second best,..... vol. Trans.
Best Dynamometer,..... 20	Best farm horse cart,..... 5
Best Farm wagon,..... 10	Best ox cart,..... 5
Second best,..... vol. Trans.	Best horse rake,..... 5
Best half doz. hand rakes, Dip.	Second best,..... vol. Trans.
Best grain cradle,..... 3	Best ½ doz. grass scythes, Dip.
Second best,..... Diploma.	Best " cradle " Dip.
Best half doz. hay forks, Dip.	Best " dung forks, Dip.
Best harrow,..... 5	Best threshing machine,..... 15
Second best,..... vol. Trans.	Second best,..... vol. Trans.
Third best,..... Diploma.	Third best,..... Diploma.
Best fanning mill, Silver med'l.	Best straw cutter, Silver med'l.
Second best,..... vol. Trans.	Second best,..... vol. Trans.
Third best,..... Diploma.	Third best,..... Diploma.
Best improved ox-yoke,..... 5	Best clover machine,..... 10
Second best,..... Diploma.	Second best,..... Diploma.
Best flax and hemp dressing machine, \$10.	

Articles not presenting any new and valuable improvements, will not be entitled to premiums. Implements and machines must be tested as far as possible, in the presence of the committee.

DAIRY.

BUTTER.—Not less than 50 pounds.

Best sample,..... \$15	Fourth best,..... Silver medal.
Second best,..... Silver medal.	Fifth best,..... " "
Third best,..... " "	Sixth best,..... " "

CHEESE.—Not less than 100 pounds.

Best sample,..... \$15	Fourth best,..... Silver medal.
Second best,..... Silver medal.	Fifth best,..... " "
Third best,..... " "	Sixth best,..... " "

The butter offered for premiums must be presented in butter tubs, jars or firkins.

The claimants for premiums must state in writing the time when it was made; the number of cows kept on the farm; the mode of keeping; the treatment of the cream and milk before

churning; the mode of churning, winter and summer; the method of freeing the butter from the milk; the quantity and kind of salt used; whether saltpetre or any other substances have been employed.

Those who present cheese for the premiums offered, must state in writing the time when it was made; the number of cows kept; whether the cheese is made from one, two or more milkings; whether any addition is made of cream; the quantity and kind of salt used; the quantity of rennet used, and the mode of preparing it; the mode of pressure, and the treatment of cheese afterwards.

MAPLE SUGAR.

Best sample, 15 lbs. \$15	Second best,..... Diploma.
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CORNSTALK SUGAR.

For the best experiment in the manufacture of sugar from cornstalks, from one acre of northern corn cultivated for the purpose, so as to obtain the greatest quantity of sugar, \$25.

The process of manufacture and clarifying must be particularly stated in reference to the maple and cornstalk sugar.

SILK.

Best specimen manufac'd, \$15	Second best lb. reeled silk, \$5
Second best,..... 10	Third best,..... Diploma.
Third best,..... 6	Best half bu. cocoons, 1844 10
Fourth best,..... vol. Trans.	Second best,..... 6
Best pound reeled silk, ... 10	Third best,..... Diploma.

DOMESTIC MANUFACTURES.

Best woollen blankets, \$5—Second, 4—Third, 3.	Best rag carpet, 15 yards, \$3—Second, 2—Third, 1.
Best ten yards flannel, \$5—Second, 4—Third, 3.	Best double carpet coverlet, \$4—Sec'd, 3—Third, 2—Fourth, 1
Best 10 yards woollen cloth, \$5—Second, 4—Third, 3.	Best pair woollen knit stockings, \$2—Second, 1—Third, Diploma.
Best woollen carpet, \$5—Sec'd, 4—Third, 3.	Best wove woollen stockings, \$2—Second, 1—Third, dip.
Best tow cloth, 15 yards, \$1—Second, diploma.	Best cotton wove stockings, \$2—Second, 1—Third, dip.
Best 10 yards linen, \$5—Sec'd, 4—Third, 3.	Best lb. of linen sewing thread, \$2—Second, 1—Third, dip.
Best 10 yards linen diaper, \$5—Second, 4—Third, 3.	Best linen woven stockings, \$2—Second, 1—Third, diploma.
Best hearth rug, \$5—Second, 4—Third, 3—Fourth, 2—Fifth, 1—Sixth, diploma.	Best linen knit stockings, \$2—Second, 1—Third, diploma.
Best ten yards kersey, \$3—Second best, 2—Third, 1.	Best knit cotton stockings, \$2—Second, 1—Third, diploma.

VEGETABLES.

For 6 best stalks Celery, .. \$2	2 best purple egg plants, .. \$1
3 best heads Cauliflower, .. 2	Best h'f peck Lima beans, 1
3 best heads Broccoli, ... 2	Best " Windsor do. 1
12 best white table turneps 1	Best bunch double parsley, 1
12 best Carrots,..... 1	3 best Squashes,..... 1
12 best table Beets,..... 1	Largest Pumpkin,..... 1
12 best parsneps,..... 1	12 best ears seed corn,.... 1
12 best Onions,..... 1	Best h'f p'k table potatoes 2
3 best heads of Cabbage, .. 1	Second best " " 1
12 best Tomatoes,..... 1	Best variety seedling " 5

Discretionary premiums will be awarded on choice garden products not enumerated above.

FRUITS.

For the greatest variety of table Apples, \$5.
For the second greatest, .. \$3 | For the third greatest, vol. Tr.
For the best twelve sorts, not less than three of each, \$3.

Best new seedling Apple, \$5.

For the greatest variety of table Pears, \$3.

For the second greatest,..... Vol. Transactions.

For the greatest variety of Winter Pears, .. " "

For the best twelve Quinces,..... " "

For the best twelve Peaches,..... " "

For the best twenty-four Plums,..... " "

For the best six bunches of native Grapes, .. " "

For the best six bunches of foreign Grapes, .. " "

FLOWERS.

For the greatest variety and quantity, \$5.

For the second greatest, .. \$3 | For the third greatest, vol. Tr.

For the best Floral Ornament, \$5.

For the second best,..... \$3 | For the best s'd'g Dahlia, \$3

For the third best, vol. Trans. | For the second best,..... 3

For the best twenty-five varieties of Dahlias, \$5.

For the second best,..... \$3 | For the third best, vol. Trans.

PLOWING MATCH.

First premium,..... \$15 | Third premium,..... \$10

Second premium,..... 12 | Fourth premium,..... 6

Fifth premium, Diploma.

Each competitor will be required to plow one-fourth of an acre of sward land in 75 minutes; the furrows not to be less than 12 inches wide and 6 deep—plowman to drive his team.

FIELD CROPS.—(At Winter Meeting.)

Best crop of wheat not less than one acre, \$15.

Second best,..... \$10 | Third best,..... 2 vols. Trans.

Best two acres of spring wheat, \$15.

Second best,..... \$10 | Third best,..... 2 vols. Trans.

Best crop of Indian corn, not less than two acres, \$15.

Second best,..... \$10 | Third best,..... 2 vols. Trans.

Best crop of Barley, not less than two acres, \$10.	
Second best,..... \$5 Third best, vol. Trans.	
Best crop of Rye, not less than two acres, \$10.	
Second best,..... \$5 Third best, vol. Trans.	
Best crop of Oats, not less than two acres, \$10.	
Second best,..... \$5 Third best, vol. Trans.	
Best crop of Potatoes for table, not less than one acre, \$10.	
Second best,..... \$5 Third best, vol. Trans.	
Best crop of Potatoes, quantity considered, not less than 1 ac. \$10.	
Second best,..... \$5 Third best, vol. Trans.	
Best crop of Sugar Beets, not less than half an acre, \$10.	
Second best,..... \$5 Third best, vol. Trans.	
Best crop of Mangel Wurzel, not less than half an acre, \$10.	
Second best,..... \$5 Third best, vol. Trans.	
Best crop of Ruta Baga, not less than one acre, \$10.	
Second best,..... \$5 Third best, vol. Trans.	
Best crop of Carrots, not less than one acre, \$10.	
Second best,..... \$5 Third best, vol. Trans.	
Best crop of Peas, not less than one acre, \$10.	
Second best,..... \$5 Third best, vol. Trans.	
Best acre of corn for fodder, sown broadcast, \$5.	
Best half acre of hops,.... \$5 Best half acre of tobacco, \$5	
Best " " flax, 5 Best acre of cabbage,..... 5	
Best acre of broom corn, \$5.	

Those who present claims to premiums for farm crops, must state in writing the following particulars:—The condition of the soil at the commencement of cultivation for the crop; the previous crop and cultivation, and quantity of manure used upon it; the quantity and kind of manure the present season; the quantity and sort of seed used; the time and manner of sowing, cleaning and harvesting the crop; the amount of the crop determined by actual weight or measurement; and the expense of cultivation. The land shall be measured by some sworn surveyor, and the claimant of the premium, with two other persons who assisted in measuring, shall certify under oath as to the quantity produced from the piece of land mentioned in the certificate of the surveyor.

DISCRETIONARY PREMIUMS,

Will be awarded for such implements, products, &c. not enumerated, as shall be deemed worthy of notice or encouragement.

COMPETITION FROM OTHER STATES.

Premiums in form of Silver Medals, open to competition from other states, will be given

For the best bull and cow of any breed—Second best, 2 vols. Transactions.

For the best yoke of working oxen—Second best, 2 vols. Tr.

For the best pair of fat cattle—Second best, 2 vols. Trans.

For the best pair of matched horses—Second best, 2 vols. Tr.

For the best pen of 5 fine woolled ewes—Sec'd best, 2 "

For the best fine woolled buck—Second best, 2 vols. Trans.

REGULATIONS.

The premiums for Essays and Agricultural Implements, will be open to citizens of other states; all others will be confined to residents of this state, who are members of this Society, or who may become so by the payment of one dollar on entering their articles.

The trial of plows will take place at Poughkeepsie, on Monday, the 16th day of September.

No premiums will be paid on any animals or articles taken away before the close of the Fair.

Premiums not claimed within four months after they are awarded, will be considered as donations to the Society.

All persons who intend to exhibit Cattle, Horses, Sheep or Swine, should give notice to THOMAS L. DAVIES, Poughkeepsie, or HENRY O'REILLY, Recording Secretary, Albany, previous to the 10th of September, that the necessary arrangements may be made for their accommodation—and all animals must be on the ground by 9 o'clock, A. M. of the 18th September.

All those who intend to compete for the premiums on agricultural implements, butter and cheese, sugar, cocoons, silk, &c. should have their specimens on the ground on the 17th, that they may be deposited in their appropriate places, and the rooms suitably arranged on the day previous to the Fair.

Applicants for premiums are requested to pay particular attention to the notes attached to the premiums on Dairy Cows, Fat Cattle and Fat Sheep, Butter and Cheese, Field Crops, Maple Sugar, &c.

The statements required from those who compete for field crops, must be sent to HENRY O'REILLY, Rec. Secretary, Albany, previous to the 1st of January, 1845, and the premiums will be awarded at the annual meeting of the Society, on the third Wednesday of January.

Competitors for the premiums on Essays, must forward their manuscripts to the Rec. Secretary, Albany, previous to the 1st of January, 1845, free of postage.

No premium will be awarded, unless, in the opinion of the Judges of the Class in which it is offered, the animal or article is worthy of such premium.

Prize animals and implements at the previous exhibitions, will be allowed to compete for the prizes: but they must receive a higher prize, or in a different class, to entitle them to a premium. Should the same premium heretofore given them be awarded, they will receive a certificate to that effect, instead of the prize.

Animals and other articles offered for competition, must be labelled with the names and residence of the owners at full length.

FOREIGN INTELLIGENCE.

By the arrival of the mail steamer at Boston on the 20th ult. we were put in possession of our usual supply of Foreign papers and Magazines; but our pages were too full, on their receipt, to enable us to give extracts this month. We also received letters from two of our friends—that from Mr. ROTCH we are compelled to lay over till next month—from the other, we have only room for the following extracts, giving an account of the great show of Fat Cattle, at the Smithfield market:

London, Dec. 31, 1843.

GENTLEMEN—I know not that I have anything to communicate that will be regarded by you as possessing much interest. Considerable excitement prevails here among the farmers at this time, on account of the recent declaration of Earl Spencer, in favor of the Anti-Corn-Law-League. The sensation however, is not likely to be lasting. His Lordship is not an *excitable* man; the sentiments which he has lately very temperately declared, being only those which he has entertained for several years; and although his present position will not, probably, (judging from his well known character,) be very strenuously maintained, yet his reputation as a statesman and agriculturist is such that his opinions cannot be without their influence.

The great show of fat stock, farm implements, &c., at Smithfield, on the 7th, 8th and 9th of Dec., was superior in numbers to any previous one, and the quality of the animals is said by connoisseurs who have had the opportunity of comparing, not to be inferior. The spirited competition between those two rival breeds of cattle, the Short Horned and Herefords, resulted this time somewhat in favor of the former. Last year the Herefords seemed to have rather the advantage—they taking all the first, and seven out of the eleven prizes on *oxen*. Of the prizes given for oxen and steers, the Herefords took *six*, the Short Horns *three*, and the Devons, *two*. For cows and heifers, the Short Horns took *four*, a cross bred Short Horn and Ayrshire *one*, the Herefords none. The most successful prize takers, were, for the Short Horns, Sir C. R. Tempest and Earl Spencer—for the Herefords, Mr. Perkins, the Earl of Warwick, and others—for Devons, Mr. Umbers took both prizes.

The show of fat sheep was particularly fine. The Leicesters and Improved Cotswolds, among the long-wooled breeds, and the South Down among the short-wooled, as usual bore away the palm. Mr. Twitchell and Mr. Umbers, were the most successful with the long-wools, and Mr. Grantham and Mr. Webb with South Downs.

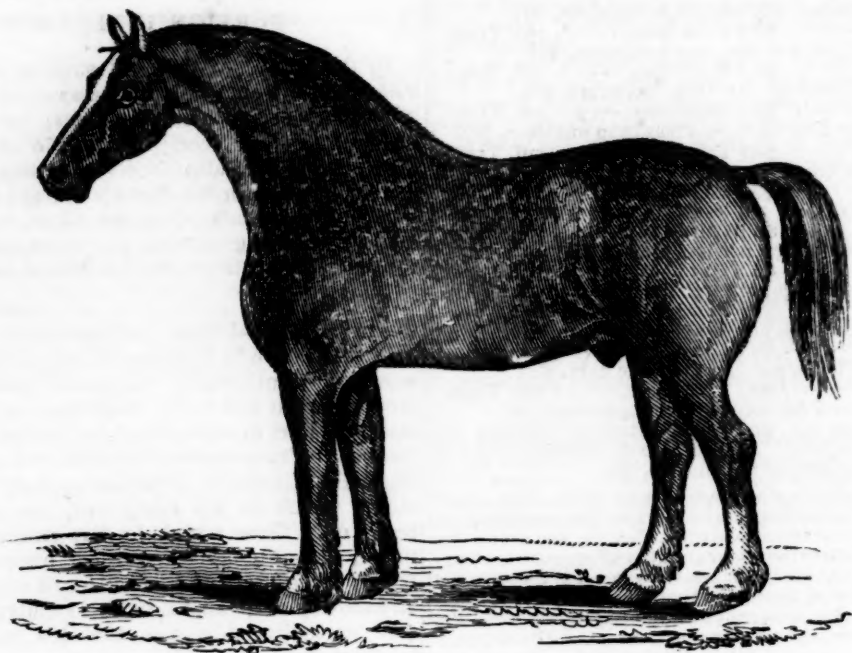
The show of pigs was very good. The Improved Black Essex, exhibited by Mr. W. Fisher Hobbs, were most esteemed, and took the highest prize. There was a pen of three Suffolk pigs exhibited by His Royal Highness, Prince Albert, which were very pretty, and were much admired; but as the judges in this case, as heretofore, showed themselves to be no "respecters of persons," the Prince's animals, although acknowledged good and highly creditable to him as a farmer, could take no prize. The Prince attended the show, and particularly examined the stock and implements, with all which he was much gratified.

Among the horses exhibited was a most enormous Cart Horse, which, though not five years old, was nineteen hands high!

For a particular and highly interesting account of this show, I refer you to the Farmers' Journal of Dec. 11.

The impression seems to prevail here, that the last grain crop was less than an average, and that the demand for American flour will increase. Considerable agitation exists in regard to the Corn-market, and in what the controversy in regard to the corn-laws, will finally result, cannot now be foreseen—a considerable reduction of rent, is all that can reconcile the tenant farmer to the system of reduced duties.

You will see by the papers an account of the death of Mr. J. C. Loudon, the well known author of many very valuable works on agriculture, horticulture, floriculture, &c.



ENGLISH CART HORSE.

THE DRAFT HORSE.

THE above cut represents a Stallion of the improved draft breed, for which the first prize of fifty sovereigns was awarded to the owner, at the meeting of the Highland Agricultural Society, at Aberdeen, Scotland, in 1840. The general characteristics are evidently those of the improved English Cart Horse, which, on the authority of British writers, may be summed up as follows:

This breed are generally small headed for their size, short necked, with thick shoulders, standing rather upright to the collar, short in the back, very wide in the breast, deep and round in the body, with broad backs and loins; the quarters thick, the thighs and fore arms very strong, the legs short, with large round hoofs. They possess great strength, and though somewhat slow, they are not deficient in bottom, and from their great weight, as well as muscular power, they go through draft work that could be performed by no other animal.*

From what we have seen of this class of horses, we are inclined to the opinion that they possess properties that are well calculated to improve the stock of this country for farming purposes. Several years ago a grey horse called *Columbus*, was sent into Massachusetts by Gen. John Coffin of the British army—a gentleman, who with his brother, Admiral Sir Isaac Coffin,† expended much money in the purchase of the best cattle and horses in England, which were sent as presents to the Ag. Soc. of Massachusetts, their native state. *Columbus* was kept several years in the different counties of Massachusetts, and his progeny were esteemed as the most powerful draft horses that could be had.

Messrs. Corning & Sotham of this city, have an imported English Cart Horse, which we think worthy the notice of those who wish to rear horses for farming purposes, or for heavy draft. The form and size of this horse indicate prodigious strength, and though a person who was unacquainted with the breed might suppose his motions were sluggish, we are satisfied from having seen him in harness, that his natural walk is faster than that of horses in general, and that he is sufficiently active for the plow or wagon. Though not yet five years old, and not within two years of his full weight and power, he

* Complete Grazier, and Low's Illustrations of British Animals.

† Admiral Coffin presented the Mass. Ag. Soc. at different times, a bull and cow of the Durham breed—(*Admiral* and *Anabella*)—a bull and cow of the Hereford breed—(*Sir Isaac* and —) two stallions and a mare of the Cleveland Bay breed, or stallions of the racing breed—(*Barefoot* and *Serab*.) *Barefoot* was afterwards reshipped to England to run a great race.

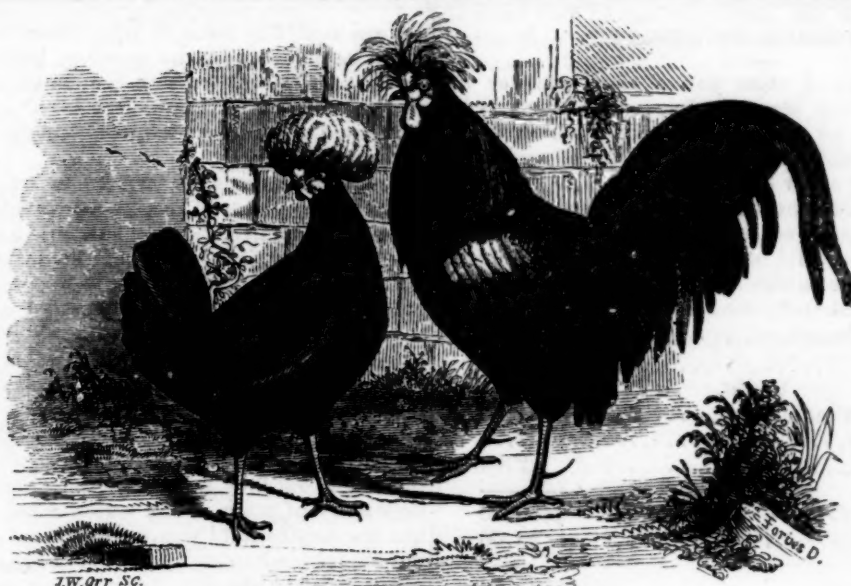
will move off with a load that would astonish the driver of a common horse. He is hardy, and is kept fat with only moderate feeding.

The best of the heavy Dutch horses of Pennsylvania, bear a considerable resemblance to the horses above described, and some of them are excellent for draft.

SURFACE AND DRILL MANURING.

MESSRS. GAYLORD & TUCKER—Doubtless when materials and facilities are had, the best general manner of enriching the soil, is that of incorporating or diffusing the manure therein, so as to have it mixed throughout. But then, in given circumstances, it may be acknowledged that surface and drill manuring have their peculiar advantages. As to my own experience at least, I have found striking benefits in the latter practice. I have doubled my crops of wheat and other small grain, in some cases, by a covering of an inch or so of pine straw or leaves; either applied immediately after sowing, or, as to wheat and rye, in the winter, at my leisure; and then in the spring sowed my clover seed; the growth of which, protected by the shade of the surface covering, (even in light sandy soil,) stood a drouth that otherwise would have proved destructive. And if not sowing clover, I find the surface covering (partly decomposed,) after shading the small grain, plowed under with the stubble, a great advantage to a succeeding crop. My practice in planting corn, is to drill 7 feet, and plant a row of southern field peas between each row of corn. I plow deep, and then putting the manure in the furrow, (into which the old cornstalks are previously thrown,) I run a furrow each side so that the manure is covered, with a hollow left directly over it, in which the seed is put at proper distances; and the manure, through which the perpendicular roots run, is never disturbed by after culture. And therefore, as in some other ways of applying the manure, no danger of firing or injury thereby through dry weather. As to the ruta бага, or other turneps, or cotton crop, or other tap rooted plants, the aforesaid plan of drill manuring does finely. On ordinary land, by this plan, I have raised at rates of 600 bushels of ruta bagas to the acre. And by putting a shovel full or so of manure, put in deeply and covered at distances of 6 or 7 feet, and pumpkins planted thereon, I have raised fine crops in old worn out fields. By plowing and harrowing for after crops, succeeding those of surface or drill manuring, the soil is gradually renovated or brought to a desirable state of fertility. But more of this another opportunity, in the meantime yours, &c. with all due respect.

Brinkleyville, N. C. Jan. 1844. SIDNEY WELLER.



POLAND COCK AND HEN.

CRESTED FOWLS.

THE varieties of *crested* fowls, or those having a crown of feathers proceeding from a fleshy protuberance on the back of the head, are numerous. We have been informed by a gentleman of much observation who has several times traveled through Europe, that they are common in France, Italy, Holland, Belgium, Germany, Poland, and England. Their general characteristics are the same, although they are to be met with of every grade of color, and are the more highly prized as the colors are more beautiful and rare. They are occasionally met with having five toes to each foot, like some of the Dorkings, and some of the Bantams. Their combs and gills, or wattles, are usually much smaller than in other breeds, and there are some whose heads are almost entirely destitute of these appendages. It is this race of fowls which the poultry fanciers of the old countries have mostly cultivated, and hence it is that particular tribes are found, each possessing some striking or fanciful peculiarity, which has become more or less fixed and hereditary, according to the degree of care and skill which has been bestowed in breeding. They are considered good layers, seldom or never wanting to 'set,' and though their growth is slow, their flesh is better and more delicate than that of common breeds. Their size is about a medium. Where birds of prey abound, these fowls are reared with more difficulty than others, as, owing to the obstruction of the sight from the crown of feathers, they are more easily caught.

Where the object is eggs, we know of no breeds that are preferable to these. They will lay more eggs until they are two or three years old, than any other sort with which we have ever had any acquaintance. As before observed, they are not inclined to set, but will sometimes lay two days out of three, except in the season of moulting, for two or three years—this has given them the name of "everlasting layers." But from the circumstance of their constantly laying, they *break down* or grow old sooner than those kinds which have intervals of setting—the same as cows that give a great deal of milk, and continue to do so all the year, generally fail sooner than those which give less, and go dry a part of the time.

Where it is desired to breed these fowls, it is best to have some kind that set well, (the *game hen* is *first rate* for this,) to hatch the eggs and rear the chickens.

Of the varieties of the crested fowl, those are most prized by the fanciers which are most rare. Such as *black*, with white tops—the *clear white*—the *white*, with *black* tops, (very rare)—the *silver* and the *golden*, a pheasant, a rare and very beautiful kind.

The originals from which the figures at the head of this article were drawn, belonged to Mr. C. N. BEMENT, and were of the variety which are black with white tops, commonly called the *Black Polanders*.

PROFITS OF POULTRY.

MESSRS. EDITORS—Agreeably to your request, I herewith forward you the account which I have kept with our fowls the past year. They have been confined in a yard of about half an acre, with a house and shed made expressly for them. The house is thirteen feet square, and two stories high. The first is devoted to feeding hoppers and nests, and the second to the roosts. In the shed is dry sand for them to roll in, and boxes of lime, gravel, &c. The fence is made of pickets six feet high, which we find sufficient; after they have been confined for a short time, they become attached to the yard, and seldom attempt to fly over the fence. Around the yard, close to the fence, is set a hedge of white pine trees, and a cluster in the middle, where the fowls resort in hot weather, and as a shelter from hawks.

Most of the fowls were of fancy breeds. The geese of the large Bremen and Chinese varieties. They have been allowed as much grain as they would eat, and a few boiled potatoes fed to them while warm, and occasionally animal food, such as boiled liver, &c. in winter, with lime, gravel, and a constant stream of water running in the yard. Their food was changed often. It consisted of oats, wheat screenings, millet and corn. We found that twelve quarts of oats were sufficient for seventy fowls per day, and other grains in proportion to their weight.

Poultry Establishment.	Dr.	Contra.	Cr.
To 15 Cocks, 50c. each, ..	\$7.50	By 3978 Hen's eggs 12c. ..	39.78
69 Hens, 37½c.	25.87½	39 Duck's eggs, 12c.	39
3 Turkeys, 62½c.	1.87½	39 Turkey's eggs, 12 c. ..	39
7 Geese, \$1.	7.00	50 Guinea hen's eggs, 6c. ..	25
1 Fancy Duck, \$1.	1.00	47 Geese eggs, 36c.	1.41
1 Guinea Fowl, 25c.25	41 Fowls sold,	46.31
71 bu. screenings, 15c. ..	11.25	5 Geese sold,	7.00
4 bush. Millet, 50c.	2.00	30 Fowls killed,	7.06
14½ bush. Corn, 42½c.	6.07	2 Geese killed,	2.00
30½ bush. Oats, 24c.	7.26	2 Turkeys killed,	1.00
8 bush. Potatoes, 25c. ..	2.00	11 Fowls died,	
32 Fowls purchased, ...	15.09	1 Turkey died,	
3 Turkeys purchased, ..	1.13	6 Fowls presented,	
	\$88.30	32 bu. manure sold to the	
		Morocco Tanner, ...	6.00
		54 Hens on hand, 37½c. ea.	20.25
		18 Cocks, 50c.	9.00
		6 Geese, \$1.	6.00
		1 Duck, \$1.	1.00
		10 Turkeys, 50c.	5.00
		2 Guinea fowls, 25c.	50
			\$153.34
		Expense,	88.30
		Profits,	\$65.04

Valuing them at the price of common poultry, (that is 15 cents a piece for the fowls, and 50 cents for the turkeys and geese, leaves a profit of \$30.51.

Albany, Jan. 8, 1844.

GEORGE BEMENT.

"EXPERIMENT WHEAT."

MESSRS. EDITORS—I send you a short chapter on wheat. On the 6th of May last, I sowed $11\frac{1}{4}$ bushels of experiment wheat, on six acres of ground, which I understand has been under the plow for 8 or 10 years. I threshed my wheat a few days since, and had the pleasure of measuring 140 bushels of wheat, and 6 bushels of screenings from the six acres. See Cult. v. X, p. 133.)

One acre I suppose, did not yield more than 10 bushels, as it was drowned out. Some of the best I suppose, yielded 35 to 40 bushels to the acre.

The expense of cultivating the six acres,	
was	\$59.00
Credit.	
144 bushels of wheat,	144.00
Straw,	4.00
Screenings,	2.00

\$150.00

Deduct expense, 59.00

Leaves nett profit, \$91.00

Thus my wheat cost me a little less than 40 cents per bushel. The wheat is good and handsome, and the flour is good for all purposes. I consider it more sure than other kinds of wheat, because it is perfectly acclimated.

Cazenovia, N. Y., Jan. 4, 1844.

S. PECK.

SALINE MANURES APPLIED TO INDIAN CORN.

MESSRS. GAYLORD & TUCKER—I promised you early last summer, to furnish you with a detail of the result of my experiments in saline manures applied to maize, (Indian corn.)

I mixed each of the following salts with dry, well pulverized muck, 2 oz. of salts to 4 quarts of muck, and applied such mixture to ten hills of maize, taking care to incorporate it thoroughly with the soil. The hills were as nearly equal in the number of stalks, and quality and condition of the soil, when the manure was applied, as it was practicable to have them, and were three feet and a half apart from the center of the hill each way. The manure was applied on the 10th of July.

When the corn was cut up, the ten hills of each kind were carefully preserved by themselves, and at the time of husking, I took into the field my scales, and accurately weighed each kind, noted the weight, and counted the number of ears. The result I give you below. There was no difference perceptible to the eye, in the quantity of stalks of the different kinds, except in the case of No. 1; the stalks and ears of corn of that were smaller than either of the others; and you will perceive that it produced more ears and less weight of corn than either of the others.

No. 1. Carbonate of ammonia, 51 ears, weighing 21 lbs. 12 oz.	
2. Muriate of ammonia, 49 " " 22 " 4 "	
3. Nitrate of ammonia, 47 " " 22 " 4 "	
4. Phosphate of soda and ammonia, equally mixed, 50 ears, weighing 24 lbs. 8 oz.	
5. Phosphate of soda, 48 ears, weighing 23 lbs. 12 oz.	
6. Nitrate of potash, 46 " " 22 " 6 "	
7. Muriate of lime, 49 " " 24 " "	

I was induced to make the experiment from seeing in the New England Farmer, a suggestion that Doct. Jackson of Mass., whose scientific researches have afforded many valuable suggestions to the agricultural community, was desirous of having accurate experiments made with these and other salts, (the others I was unable to obtain,) and I regret that the late day when the suggestion of the experiment came to my notice, and a considerable delay afterwards, arising from the difficulty of obtaining the salts, prevented me from applying the manures as early as I think should have been done to be certain of their full practical effect.

The yield you will perceive is very large. According to the table in the Cultivator Almanac for 1844, there would be 3,556 hills of corn in an acre, planted $3\frac{1}{2}$ feet apart each way, and at the rate of 70 lbs. of ears to a bushel of corn, an acre manured as No. 4 was, would produce about 124 $\frac{1}{2}$ bushels of corn; the rest of that field averaged 69 bushels of corn per acre.

I am unable to learn at what price these several salts could be obtained by the quantity, but at druggist prices by the small quantity, they cost more than the corn is worth. I think it likely, however, that they may be purchased at prices which would render them cheap manures.

Seeing statements by farmers in western New-York, of enormous yields of maize when planted in drills, I last spring planted about an acre and a quarter three feet apart one way, and eighteen inches the other—three stalks together; the field was in better condition than my other maize fields, and was manured as highly as they were. The crop looked remarkably well, and I anticipated an enormous yield; but was greatly disappointed upon husking, to find that it produced only more than 102 bushels of ears to the acre; when another planted $3\frac{1}{2}$ feet apart each way, yielded 193 $\frac{1}{2}$ bushels of ears; the amount of stalks in the drilled field greatly exceeded the other, but they were far from compensating for the deficiency of grain. The experiment was fairly tried, and the drilled field was certainly as well cultivated as the other, for I intended to offer it for premium; and the result satisfied me that the common mode of planting, three and a half feet apart each way, is much the most productive, unless such an enormous quantity of manure should be applied to the field as to render the crop unprofitable.

I give this statement because I deem the detail of unsuccessful experiments, of quite as great value to farmers, as that of successful ones.

FRED. J. BETTS.

Newburgh, Dec. 19, 1843.

NUT GRASS.

MESSRS. EDITORS—In your Nov. no. an inquiry is made by Mr. H. Bond of Kingston, N. C., how nut grass may be destroyed. If by nut grass, is meant coco, of which there is much in Louisiana, we would say it is difficult to destroy. Dig it up and burn it, is the surest way. Cotton seed, or Bagasse, so called, after the juice is expressed from the sugar cane, placed, say two feet thick, we believe will destroy it; but what substitute would effect it in North Carolina, where these cannot be obtained, we cannot say. Where it has spread over an extent of surface, it must be let alone, and ditch around it to prevent its spreading.

CORNSTALK SUGAR.

We planted last summer, 4 acres of corn in a proper manner, and cultivated it with great attention. It grew finely, and matured well; the juice weighing 8 degrees, and yielded 450 gallons of juice per acre which produced 50 gallons of syrup per acre, yielding no sugar. In the same field, and immediately adjoining, we planted sugar cane, and harvested it last week, and manufactured it into sugar. It yielded nearly three, or over two and a half hogsheds of sugar, and upwards of 150 gallons of molasses, per acre.

We had supposed we could compete with the north in making cornstalk sugar, but we give it up; and reckon the north will soon do the same in the attempting to compete with the sugar cane.

GRASS

Of all the grasses ever tried in the south, the crab grass exceeds all; and in quality is equal to the best northern grasses. It may be somewhat surprising to some northern farmers, to learn that we plow up our meadows yearly, and sow them yearly. We plow them in January, February, or March, and sow them in oats, which are harvested in May or June; during this time, the grass seed, shed and left deposited on the ground from the season previous, springs up; and by September produces from one to two tons of hay per acre.

It grows rapidly if the season is not too dry, and is sometimes mowed twice or three times the same season. It makes excellent pasture. The white clover grows luxuriant here, on the Mississippi bottoms; and our pastures are now, the last of December, supplied with feed in abundance. It is a fine country for persons in moderate circumstances, as well as those of ample means. We have no paupers here.

S. TILLOTSON.

New River, La. Dec. 21, 1843.

KEEPING CATTLE IN WINTER.

MESSRS. EDITORS—Will you permit an old subscriber to give you some of his opinions on the subject of wintering stock. Here, where our winter is some five months long, economy or prudence would dictate that the methods the best for the animals, and the most conducive to profit, should be adopted; but it seems certain that the means best adapted to produce these results, are sadly neglected by my brother farmers generally.

It is frequently the case that animals are too long neglected in the fall. The cold weather comes on, the ground freezes, and the snow falls, yet the sheep or cattle are allowed to run at large, shivering in the open air, and gleaning as they best can from the frozen earth, something to satisfy their hunger. All animals, and man himself, feels the necessity of protection more on the first attack of frost, than after the system is accustomed to its action; and there is no time in the year when care and attention to stock is better rewarded than in the first setting in of winter. It cannot be too firmly impressed on the mind of every farmer, that it is much easier to keep an animal in good condition, and will require much less food to do it, by not allowing him to fall away, than to restore him after he once becomes poor. Instead then of keeping my fodder until March, to raise my animals after the flesh is nearly all gone, I endeavor to so manage them that from the first cold weather, there shall be no falling off in their food or their flesh.

Providing proper sheds or stables for stock of all kinds is indispensable, where the comfort of the animal and the profit of the breeder is at all consulted. Occasionally animals that are unprotected, come through the winter well; but such animals are usually of the hardiest kind; and it must be remembered, that if unprotected, they come out in good condition, in all probability with protection and the same amount of food, spring would have found them fat. Such instances are the exceptions to a general rule, as the multitudes of poor stock that may be seen every where in the spring, where proper care and attention is not given, abundantly proves. One great office performed by food is to keep the animal warm, and where this is done by stabling or sheds, so much food may be spared. Comfort is essential to taking on flesh, and the man who allows his stock to remain exposed and uncomfortable, must furnish extra supplies of food, or find his animals mere skeletons in the spring. Animals are grateful for their treatment, and the farmer who visits his yards daily with his basket of "nubbins," or his poultry yards with his pockets filled with corn, will find as they gather around him, plenty of evidence that such is the case.

But experience has taught me, Messrs. Editors, that food is not all that animals require. They may live with this, but this alone will not give them high health, or keep them in the sleek condition the skillful farmer desires. How often do we see animals during the winter compelled to go without drink, or to obtain it encounter such obstacles as nothing but burning thirst could overcome. The exertion of wallowing through snow drifts, and traveling perhaps a mile daily for a drink of water, will take off more flesh than an ordinary feed of hay can give, and in the end will make the beast poor. There is scarcely a farm where this inconvenience might not be remedied, if more pains were taken to select a site for the farm buildings, with reference to this and other farming comforts, rather than an anxiety to get as near the highway as possible, as if living in the road was the proper place for the farmer. Salt is necessary for the health of stock during the winter, but it should be fed to them frequently, and not in large quantities at a time.

Sheep should never be kept together in large numbers. One hundred is the utmost limit that should be allowed, and if not more than half this number, so much the better for them. Disease is usually induced by crowding too many into confined spaces, and when once introduced into such places is sure to spread. All animals should have their stables, yards, &c. well ventilated, and plenty of room for moving, or else should be occasionally allowed a chance for exercise. The good farmer is characterized by benevolence to his animals, not less than by the general management of his tillage, or his crops. He will keep

no more than he can keep well, and find his profits rather in their excellence, than in their numbers.
Orange Co., 1843. W.

A GREAT FAIR PROPOSED AT BALTIMORE.

It has been, I think, most happily suggested that the occasion of the great Conventions to be held in Baltimore in May next, should be used for a grand *display of American products, inventions, and manufactures of every kind.*

Never before have there been so many men of superior intelligence and influence at home, collected at one point, from all the states in the Union, as there will be then at Baltimore, including the members of the two conventions, which it will be remembered, are to come off within a week of each other. No description that could be written of any great improvement or discovery in agriculture, art, or manufactures, if inserted in every paper of the Union, could so widely and so accurately disseminate a knowledge of it as would such an *actual display* of such improvement or discovery to the more than 50,000 people who will undoubtedly attend these two conventions.

An obvious effect of such an exhibition would be a wonderful distribution of practical knowledge, and the establishment of agencies for vending the best machines and implements employed in every branch of industry, and the most finished products of American ingenuity. The "premium flour at Rochester," was branded and sold as such, in all the towns of this district. The object is so national, and free from all party or sectional taint, that all patriotic editors and citizens may unite in promoting it. Like many other things, however, proposed for the public good, the question is, *how is it to be brought about?* Who is to move in it, and how? Let me suggest an outline of proceeding, to be superseded by any better one that can be thought of.

There is, for instance, a "Mechanic's Institute" in Baltimore; let them be called together, and a committee appointed to procure a suitable place and make the necessary arrangements for the exhibition. Doubtless other societies would unite in this useful enterprise. The city authorities would consult the interests of their constituents, and the reputation of their city, by doing the needful, and by inviting agriculturists, artisans, and manufacturers, to send forward the fruits of their industry and skill from all parts of the country. Let the Franklin Institute and other associations move in it in Philadelphia—in New-York—in Boston. Steamboats might be chartered expressly for the occasion. Proprietors of railroad and steamboat companies would doubtless agree to reduce their charges for cars and boats for the transportation of things intended for the exhibition, no less from patriotic motives, than the consideration of the rich harvest they will reap from these conventions. Nothing can be accomplished without a beginning. Let then meetings be called by even a few public spirited individuals in all the towns, and then the project will make its own way; one thing is certain—if we can get the *editors of papers to take it in hand*, the work is already half achieved; for after all, they are the great levers now by which to *move a nation*; nor is there a class of men which, as a class, contributes as much as the corps editorial, to public enterprises and public charities. If they give not as much as some more opulent classes directly in money, they accomplish much more by the *labor and the publication of thought*. A ten line paragraph will often effect more than ten times ten "silver dollars."

Washington, Dec. 21, 1843.

I. S. S.

CORN CROP.

THE editor of the *Kent News*, (Md.) raised the past season, 80 bushels of corn to the acre, on a lot of two acres—or measuring the lot so as to avoid loss by turnings, the yield was 84 bushels to the acre. The lot was clover sod, and was not plowed till planting season, when the clover was growing finely—a dressing of "common" manure was plowed under with the clover—the corn was the "white twin sort," and was planted in rows five feet apart, and the hills two to two and a half feet apart in the row.

DEARNESS OF LABOR—EFFECTS OF PLASTER OF PARIS OR GYPSUM—IRRIGATION.

THAT land in Europe produces more, acre for acre, than in this country, whether under the plow or laid down to grass, is not to be attributed to the principles of productiveness being there better understood than here, but chiefly to the want of capital and the dearth of agricultural labor in America. Is there any country where proprietors possess so little means of improving land in proportion to the land they own, as in ours? Many in the southern states, owners of hundreds of acres, have not money enough to buy a new saddle; resembling in their condition, that of a man who may be supposed to perish with cold in the midst of a forest, for want of a spark of fire, or a steel and flint to strike one. Hence the great value of labor saving machinery in our country; and as necessity has been aptly called the mother of invention, no country has displayed so much ingenuity as ours in the invention of contrivances to economise labor.

Far from being behind hand in the art of agricultural improvement, no people on the globe excel us in agricultural knowledge; nor has any made greater improvement in comparison with the labor at the command of the farmer. Every one understands for example, the paramount importance of increasing his pile of manure; but in no one thing is the dearth of labor so much felt as in the quantity of it which is required to collect the materials for manure, and to haul out and distribute it after it is made. Herein consists the great value of gypsum on lands to which it is congenial; for on some, as for instance on the eastern shore of Virginia and Maryland, owing perhaps to their alluvion soil or saline atmosphere, or to both, it is said to have but little effect; while in other parts of both these states, its effect is absolutely magical. The very small quantity required—a bushel to the acre—and the quickness with which it is applied, has arrested the progress of exhaustion in some of the counties, which, before it was introduced, were on the high road to ruin. In some other respects its effects have been remarkable. It has been the cause, in Prince George's county for example, of increasing the possessions and fortune of land holders, and diminishing the aggregate population. The rapidity with which large bodies of the poorest could be converted into tobacco land, yielding 1,000 weight to the acre, the high price of that article, and the improvements in the implements and modes of culture, by which planters have come to make four or five hogsheads "to the hand," enabled the enterprising land proprietor and slave owner, to make his land, purchased on time, *pay for itself*. Thus, small proprietors of land, owning few or no slaves, were bought out, and moved away to the west large estates have been accumulated by individuals, while the actual population of that county, perhaps the most productive in the state, and within striking of Baltimore, with its population of 100,000 inhabitants, and bordering on the cities of the District of Columbia, has diminished from 20,216 in 1820, to 19,539 in 1840.

The following are among many similar cases to show the operation of the influences to which I have referred; the facts are stated on indubitable authority. The late Governor Robert Bowie, a man of singular energy of character and of the highest moral worth, at the time and under the state of things already referred to, purchased two hundred acres of poor "broom sedge land" for \$1400. He put half of it in corn, and probably gathered not more than 10 or 15 bushels to the acre; sowed it down to oats the next spring, and on them sowed clover and plaster of Paris or gypsum. Plastered the clover the succeeding spring, and the spring following planted in tobacco, and sold from it 100,000 weight at \$10 per hundred; making \$10,000 for half of the land, which three years before he had purchased, probably "on time," for \$1400! Many similar instances might be given of the effects of plaster of Paris in producing all the results I have stated, but I am wandering from my subject.

Much and effectively as our ingenuity has been taxed in the invention of every expedient to save labor, it seems to me that there is one means of augmenting our crops of grass in a manner as wonderful or at least as great as the

effect of plaster of Paris on cultivated crops—which is much practiced in some parts of Europe, but strangely neglected in a country, where of all others, circumstances invite the use of it—I mean IRRIGATION.

You, Mr. Editor, would render an essential service to American Husbandry, if you would yourself give, or prevail upon some one to give an essay on that subject; especially, if you have at your command, so far, the kind offices of some correspondent who has seen the manner in which irrigation is conducted in Europe. I know a great man who could do it, but the game would hardly be worthy of the falcon. If I had time, I would collect the materials and digest such an essay, were it only for the benefit of a few friends who have all the resources for irrigation at command.

I. S. S.

Washington, Jan. 1, 1844.

"CLIMATE AND PRODUCTIONS OF THE SOUTH."

MESSRS. GAYLORD & TUCKER—A more coolly impetuous defence or rather *attack*, than that of the "EDITOR OF THE FARMER'S ENCYCLOPEDIA," who is he? I have never before met with. He *dares* undertake to *cut down and fill up* such a work as Johnston's Encyclopedia, to "adapt it to general circulation" in this country, and admits such an article as the one in question—a perfect mass of false statements, and calculated, if allowed to go uncontradicted, to do decided injury to the interests of the South—and when those directly interested, point out the falsehoods, he turns round and tells us, "he did not write the article, but that a *Southern man, born and educated in South Carolina*, did write it," and therefore it should be received as gospel! A precious specimen of a *Southern man* he must be! Assuredly *not* a Southern man with Southern principles. For my part I cannot believe that the writer of it was ever south of Mason & Dixon's line. "The author is abundantly capable of taking care of himself, should he feel called upon to do so." He is, eh? Well, if he does not feel himself called upon to do so, when told again and again, that his data are almost invariably incorrect, and most of his statements untrue, he must be made of strange stuff for so bold a writer. I do not myself believe that "he will condescend to notice" the corrections that have been made of his *ingenious data*, because no man is capable of sustaining them. If he thinks he is, let him try. As to the Editor in question, his "explicitly stating from whence the article was taken," does not clear him of being suspected of a desire to do the South injustice; he has foisted a mass of false statements upon the public, and given it weight and shelter, by doing so under the wing of a work of superior character. His defence is not calculated to aid in the circulation of his edition in the South.

NUT GRASS OR COCO.

A correspondent dating from Kingston, N. C., is desirous of knowing how to destroy Nut Grass. By this I presume he means *Sweet Coco*. If the *Bitter Coco*, which is ruining some of the finest lands on the Mississippi, and spreading rapidly through the interior, I know no means of destroying or even checking it. But if it be the first named, which is dug up by the children for its nut-like root, it can be destroyed; not without much labor, however. Let your correspondent continue *during one entire summer*, to cut it up before going to seed, taking care to go deep enough to bring it away *below* its tuft of fibrous roots, which branch off at about half an inch below the surface, and the *nuts* will die. If the ground is already full of seed, it will require more than one year to destroy it. It is a troublesome grass, but a mere trifle to its cousin, the *Bitter Coco*.

RAT PROOF CELLAR.

The method adopted by your correspondent A. B. N., for keeping moles out of his garden, will also suffice to keep rats out of a cellar; they will dig down under the wall of a house, to a considerable distance in a straight line, but will not attempt to go round an abutment at the base or L. Yours, THOMAS AFFLECK.

Ingleside, Adams co., Miss., Nov. 30, 1843.

Idleness is the Dead Sea that swallows all virtues

PHILOSOPHY OF WOOL.—No. I.

MESSRS. EDITORS—I propose to furnish your readers with several chapters on the subject of wool—embracing the anatomical structure of the fibre—the peculiarities which constitute its felting property, and other characteristics it possesses indispensable to its manufacture into broadcloth. From the extent to which the production of wool has already arrived in our widely extended and now once more prosperous country, and the certainty that it is destined to increase beyond the calculations of the most sanguine, it will be readily admitted by all, the subject is an important one. My attention has been directed to it, principally, from the ignorance which so generally prevails with farmers, and indeed with very many high above them in general intelligence, as to the felting principle of wool. All well know the fact, that cloth of wool, after being taken from the loom and subjected to a process of the manufacturer called *pulling*, will thicken to almost any degree desirable, by a general and uniform contraction of its dimensions. Now let the reader at once put the query to himself, what is the cause? and if he can render a philosophical solution, he may be considered an exception, not among hundreds, but thousands.

In the discussion of the subject, I beg leave to state that no claim is set up to originality; therefore, all I can claim of your readers is their thanks for imparting information difficult of access to all, condensing what I have found in many instances diffuse, and making more perspicuous what I have found in a measure obscure. The first thing deemed necessary to notice is the

STRUCTURE OF THE SKIN.

The skin of the sheep, and of animals generally, is composed of three coats, or layers. The external one is called the *cuticle* or *scarf skin*, which is exceedingly tough, devoid of feeling, and pierced by innumerable small holes, for the passage of the wool and insensible perspiration.

The next layer is termed the *mucus coat*, a soft structure, its fibres having scarcely more consistence than mucilage, and consequently separated with much difficulty from the coat below it. From the fact that the pulpy substance of this layer uniformly approximates the color of the hair, or wool, it is supposed that here resides the coloring matter. This is the seat also of sensation; the nerves, or rather their terminations, ramifying minutely in its substance.

The third or lowermost layer is the *cutis* or *true skin*, a dense firm elastic substance, in order to fit closely to the parts beneath, to yield to the various motions of the body, and the resistance of external injury. The true skin is composed almost entirely of *gelatine*, so that although it may be dissolved by much boiling, it is insoluble in water at the common temperature.

It is well known the skin of the sheep is seldom fully tanned, but is prepared in a peculiar way, and used for the common sort of binding for books, or is converted into parchment, which, from its durable nature, is used for the inscription of documents of more than ordinary value. Other uses made of the pelts of lambs in foreign countries, mention will probably be made hereafter.

ANATOMY AND CHEMICAL COMPOSITION OF WOOL.

Although the fibre of wool has been tested by severe examinations of powerful microscopes, its internal structure is not yet definitely settled—whether solid, or consisting of a hard exterior tube with a pith within. The weight of testimony, however, is much in favor of the supposition of the latter. The fact may be adduced in support of this conclusion, that a sheep when in high condition, the wool growing upon it is coarser than another whose condition is the reverse, the fibre being distended apparently from no other cause than the superabundance of secretive matter designed for its growth. Could it be otherwise were it not tubular in its conformation? It may, however, proceed from another cause, for it has been well ascertained that the fibre is vascular, being supplied with vessels which convey nourishment from the pulp, which seem to accompany it to a considerable distance from the root, if not through its whole ex-

tent. The learned Dr. Good says:—"The *Plica polonica*, a disease whose existence is doubted by some, but of the occasional occurrence of which there is abundant testimony, completely establishes the vascularity of the hair; for it is an enlargement of the bulk of the hair itself; an enlargement of the individual hairs, so much so as in some cases, to permit the passage of red blood, for the hair will bleed when divided by the scissors." Admitting it to be true that the hair is vascular, it follows that the fibre of wool is also; and hence if a sheep is in more than ordinary condition, the consequent repletion of the fluids would cause an increased bulk of the fibre, without the necessity of a tubular conformation. But I take leave of the question, with the repetition that the preponderance of testimony is in favor of the theory that the fibre is hollow.

Each fibre of wool is composed of a number of filaments or smaller hairs, ranged side by side, which cannot be perceived without difficulty, from the tendency it sometimes has to unravel at the point. Mr. Bakewell has remarked on this as follows: "Hair is frequently observed to split at its points into distinct fibres—a division has also been seen in the hair of wool. This seems to prove that they are formed of distinct long filaments uniting in one thread or hair. In large hairs I have discovered a number of divisions from the root to the point. In one hair I distinctly perceived fifteen of these divisions or fibres lying parallel to each other, and in some of the fibres a further subdivision was distinguishable. Probably these subdivisions were each composed of others still smaller, which the limited power of our instruments may prevent us from discovering. If such be the structure of the hair of some animals, it is at least probable that the hair of all others may have a similar conformation, although the fibres of which they are composed may be too minute, or adhere too firmly together to permit us to separate or distinguish them."

The fact has long since been established that the chemical composition of nails, hoofs, horns, hair, wool, and even feathers, is substantially the same. According to Henry, they are made up of an animal substance resembling coagulated albumen; and sulphur, silica, carbonate and phosphate of lime, and oxides of iron and manganese. The similarity of the odor of hoofs, horns and hair, perceptible when burned, is within the experience of all. It is also well known that the horns of cattle are made up of elongated fibres or hair, which will be obvious to any one who will take the trouble to examine with the aid of a microscope. Indeed, without this instrument, the fact can be established as exemplified in the horns of the deer, at certain stages of the growth, and also those of the giraffe, on the surface of which hair can be distinctly traced. Other testimony may be found in the circumstance, uniformly the same, that the horns conform in the degree of their twist or curve to the hair or wool of the animals on which they respectively grow. Thus, in the Angora goat and wild sheep of the Rocky mountains, the horns are, like the hair and wool they produce, comparatively straight; while the horns of the Saxon and Merino resemble the beautiful spiral curve of their wool. The yolk, with other matters, will be considered in my next.

L. A. MORRELL.

Lake Ridge, Tompkins co., N. Y., Jan. 4, 1844.

PRESERVING POTATOES THROUGH WINTER.

AN intelligent neighbor practices the following modes by which he rarely loses one bushel in five hundred. The potatoes are placed in a large heap on dry ground, and covered with straw in sufficient quantity to be at least one foot thick around the heap when closely packed. Three or four inches of earth are then shoveled upon it. During the mild weather of autumn, a hole is made in the top for ventilation, which is closed on the arrival of the severe frosty weather in winter.

J. J. T.

BLACKWOOD'S MAGAZINE.

THE New World edition of the Dec. no. is received. It is issued by J. WINCHESTER, New World Press, No. 30 Ann st., New-York, at \$2 a year in advance; *cheap enough*, for it is one of the best publications "a-going."

IMPROVED PAULAR MERINOES.

MESSRS. GAYLORD & TUCKER—In the 10th vol. of your truly valuable paper, p. 168, after giving the prices obtained for the wool from two very superior flocks of Saxony sheep, you request other breeders of sheep to inform you of the average weight of fleeces, and the prices obtained, that the comparative profits of the different breeds may be seen. You ask me, in particular, to give you the price received for the wool of my flock.

This principle of comparison is certainly a correct one; that we should be informed of the average weight of fleeces, prices received, and in fact the entire profits of the flock, is equally desirable.

An individual may give to the public the weight of wool from one or two superior bucks, and thus convey the impression that *his* is the best and most profitable flock. Another may give the price received per lb. for his wool, without saying any thing of the weight of fleece, and in the estimation of many, *he* has the most profitable sheep. But let us do as our friends Grove and Morrell have done, and as you request others to do—give the weight of fleece of the entire flock, and the price received per lb., and it is the easiest thing imaginable for any farmer to draw a comparison, and decide which will be the most profitable for him, as an individual, to keep. In forming this decision, his location, and the nature and quality of his lands, will not be overlooked.

But to the answer of your question. I ought perhaps to say in the outset, that I had a portion of the wool, (20 fleeces,) from my flock of Paular Merinoes manufactured. For that which I sold, I received 40 cts. per lb. Now, allowing that the other fleeces should give as great a net profit as those sold, and the result will be, as the entire flock averaged 5 lbs. 5 oz., that I received \$2.12½ per head. And this, you will recollect, is from a lot of breeding ewes, each of which reared a lamb, and yearling bucks and ewes, with the exception of one stock buck.

It may not be unacceptable to add an account of the profits of my little flock for one year. I find by reference to my book in which I keep an accurate account of all my sheep transactions, that I had on hand on the 1st Nov. 1842, 103 sheep. On hand Nov. 1st, 1843, 128 sheep, which is, as you will perceive, an increase of about 25 per cent above all sold and all losses. I have received in addition to this,

In wool,	\$191.80
In bucks sold,	372.00
	<hr/> \$563.80

Now, gentlemen, I know not but other flocks are better and more profitable. I will only say that I have endeavored to improve my flock since I commenced with them, and think I have succeeded in some degree at least; and am desirous that they should stand upon their own merits. I will also add, that an extensive wool grower, of the denomination of Friends, after having examined them with much care, a short time since, said, (to use his own plain language,) "Thee ought to call thy flock the *Improved Paular Merinoes*." I have no objections to this addition, and if after the several accounts which you have had of this flock, you do not think it assuming too much, you will please place as a caption to this communication, "*Improved Paular Merinoes*." Truly yours, R. A. AVERY.

Galway, Saratoga co., N. Y., Dec. 20, 1843.

SALT FOR CUT WORMS.

SALT has been repeatedly recommended in many of the agricultural papers as an infallible repeller of the cut worm. I have tried only one experiment, which is as follows: Cabbage plants were encircled a few inches from the stem, with a ring of salt about an inch wide and quarter of an inch thick; in other cases the salt was thickly strewed about them and in contact with the stems. In neither case, the cut worms paid the least regard to the salt, but walked right through it and destroyed the plants. In one instance, a cut worm was

found after having eaten off a plant, quietly reposing with all the apparent ease and indifference of a philosopher, in a white bed of nearly clean salt.

The best remedy appears to be the application of a roll of paper around the stems when the plants are set out, extending one inch above the surface, and three or four below. A burdock leaf wound round the stem, will answer the same purpose where cultivators are so fortunate as to have this plant on their grounds. J. J. T.

THE CARROT.

MESSRS. GAYLORD & TUCKER—The improvements in the ancient and honorable art of agriculture in New England, within the last quarter of a century, are truly obvious, and particularly for the last few years it has become a subject of interesting contemplation to every lover of his country.

Though the writer is desirous to contribute his mite to the laudable object of the pursuit of agriculture, it is because it is so intimately connected with the interest and well being of his country and the community. Within the last few years the cultivation of the carrot has engrossed a greater share of his attention than that of any other vegetable. If then the few ideas which are hastily thrown together upon this subject, shall ultimately lead to the best method of cultivating this valuable and nutritious root, he will be richly rewarded for whatever pains he may have taken in observing and superintending its growth. We are satisfied from experience that this plant may be brought to great perfection in any part of New England, and with suitable attention will abundantly remunerate the husbandman for all his necessary care and labor. Were our farmers who keep a large stock, to devote a spare acre to the cultivation of this root, we make no doubt they will at the harvest, find themselves in possession of a large store of feed of valuable and rare qualities for sheep, horses, and cattle, which will save largely of hay and other fodder, in times of scarcity of such crops. The three varieties of carrot that constitute the subject of these observations, are the long yellow, the large field, and the Altringham white. Scarcely any vegetable during its growth presents a richer appearance than the carrot, whether we contemplate the young plant or the mature root. Hence it may be said in truth, to be an ornamental as well as profitable crop.

For the table, the long yellow is preferable. Its surface is smooth and fibre very compact. In proportion to its size, it doubtless yields the greatest amount of nutriment. Next to this is the large field variety, on which the horse feeds and thrives well, and it gives to the hair a peculiar smooth and glossy appearance. This root is short and rough, often sending off large radicles or branches of roots. When it grows luxuriantly, it is frequently hollow at the upper part. It yields a larger crop than the former, but is better adapted to stock than the table. The Altringham white is a long beautiful root, much less nutritious than either of the other varieties, and resembles some of the finest specimens of the long white turnep. It is a hardy plant, requiring less care in its cultivation than the other varieties. Stock feed and thrive well upon it.

The soil best adapted to the carrot, is a deep rich loam, free from gravel or sand. If it be too adhesive or lumpy, ashes or lime may be mixed with it. If manure be used, it should be entirely decomposed or rotted, and intimately mixed with the earth. The ground should be plowed or spaded fine and deep, the whole being made mellow.

The seed should be planted early in April, in drills not less than 22 inches apart. When the plants spring up, they should be early freed from weeds and the earth loosened around them. The feeble plants should be pulled, leaving only the most hardy ones. At the second weeding they should be thinned again, leaving the most healthy to grow, and thus continue, leaving the most thrifty ones not less than 20 inches apart, so as to give large room for the tops. In this manner, the writer has raised the yellow carrot no less than 7 inches through, and at the rate probably of 600 or 700 bushels to the acre.

Middletown, Ct., Dec. 23, 1843.

M.

FARM LANDS OF VIRGINIA.

THE call of our Orange Co. correspondent in the Dec. no., has brought us the following: "*A Virginia Farmer*," who dates from Lynchburg, says:

"The most desirable part of Virginia, as it regards health, original fertility of soil, and cheapness of price in proportion to its value, is the vein of red land called the Piedmont region, and embracing the counties of Orange, Albemarle, Nelson, Amherst, and Bedford. It is a belt of land from fifteen to twenty-five miles wide, east of the Blue Ridge mountains. The rocks are all primitive, consisting of quartz, sandstone, &c. with occasional beds of granite. It is that region of country in which the finest Virginia tobacco has been raised. The soil is generally red, with occasional changes to grey or sandy. The growth upon it is white and red oak, hickory, poplar, ash, dogwood, and very rarely pine. It is admirably adapted to the growth of clover, and gypsum produces a powerful effect upon it. The lands when improved produce fine wheat, Indian corn, tobacco and oats, as well as garden esculents and fruits. As you advance from the lower part of this region of country to the counties of Nelson, Amherst and Bedford, the lands become cheaper in proportion to their quality. In Amherst and Bedford counties, great advantages will be derived from the James river and Kenawha canal, which is now in operation as far as the town of Lynchburg, and within about 20 miles of the Blue ridge. It will be soon carried through the mountain. The lands have been generally cleared for the cultivation of tobacco, and are in a state to be improved by judicious farming. Lynchburg furnishes a ready market for the products of Amherst and Bedford counties. The schools are such as are generally found in Virginia. A teacher is generally engaged in every neighborhood, and churches of the different denominations of christians may be found at convenient distances. It will not be necessary to bring stock of any kind, or farming utensils, or furniture, if the farmers wish to settle in Amherst or Bedford. In the other parts of the Piedmont region, the writer is not so well acquainted. The cheapness and facility of getting the products of the farm by water carriage, give to those two counties a decided advantage over the other counties. The prices of land in this region, vary from five to fifteen dollars per acre, according to quality and improvements. The best course to be pursued by persons wishing to purchase land in this region of country, would be to send an agent to examine the country. To examine the northern part of this region, the agent would pass from Alexandria in the District of Columbia, through the counties of Fairfax, Fauquier, Madison and Culpepper, to Orange and Albemarle. To examine the other counties along the line of James river, he would pass through Richmond, and with the packet or steamboat go to Lynchburg, where he could pass into the counties of Bedford, Amherst and Nelson. The land is generally in a bad state of cultivation, but is susceptible with judicious management, of the highest improvement. Being neither a land seller nor buyer, the writer has written this for no other purpose than to answer the inquiries in the Cultivator."

Mr. NATHAN LOOMIS, who moved from the Mohawk Valley to Fairfax co. (Va.) two years since, after stating the condition of churches and schools, and some other matters for which we have not room, says:

"I believe it is a pretty general opinion at the north, that the land here was originally very poor, and that it has been starved out—exhausted. Such opinion is erroneous. Fair crops of tobacco, wheat, corn and oats, have been produced on the poorest land in Fairfax. That constant cropping without applying manure, will deteriorate land in a long series of years is most true; should any one want proof of this, let him examine this county and be convinced. Its fertility has been impaired, but not exhausted. Reduced soil may be easily improved so as to equal its original fertility. The like examination will establish this fact. A large portion of the land in this county has been thrown out to commons, which produces a vigorous growth of sedge; or when sufficient time has elapsed, the sedge is supplanted by pines of ra-

pid growth. The sedge makes a thick strong turf. It requires a stout pair of horses to break it up, and it should lie a year after being well turned over before it is cross plowed. I have cross plowed some six months after turning over; but this checks decomposition, the exposed roots become dry and strong, and are slow to decay. Clover and timothy take, even without manure of any sort. Plaster and lime operate finely. Nova Scotia plaster is had in Georgetown, D. C. 15 miles from this place, ready for use, at 5½ per ton. I need not say any thing of such portions of plantations as have been continued in cultivation, and from which people obtain their support and produce for market; nor of the unbroken forests of oak, hickory, chestnut, &c. which remain in large parcels. People will examine before they purchase. I suppose the inquiries were made to learn whether it is worth the while to make the examination. The price of land varies from \$3 to \$12 or \$15 per acre."

Another correspondent, who resides four miles from Mount Vernon, says:—"The sandy or loamy land upon or near navigable water, is cheap, and well watered, and capable of high and rapid improvement. Oyster shells or lime can be had in any quantity. 150 bushels of lime, 2 gallons of clover seed, and 2 bushels of plaster, will more than restore pristine fertility. Churches are plenty, but the preachers badly paid. Schools can be made in any neighborhood, and to the taste of those who pay the teacher. Every article a farmer can want may be purchased in Alexandria. Horses, cows, sheep and hogs are plenty, and not inferior to any in New-York, that are not better fed. Sheep do well without feed, save when snow covers the ground. Horses, cows, sheep and hogs have more extensive liberty than man, for they range over the whole state, save the enclosures that are five feet high, and so close that the animal trespassing cannot creep through."

LIEBIG'S FAMILIAR LETTERS ON CHEMISTRY

EDITORS OF THE CULTIVATOR—In the latter part of Nov. ult. while in the commercial metropolis of our state, I visited the large book establishment of Wiley & Putnam, and gave you a hasty sketch of an examination of their long catalogue of agricultural and other books.*

It is now intended to present some remarks on one of the books brought with me at that time, from that great mart of modern literature and science. It is a recent publication, and strongly recommends itself to the attention and perusal of the farmer and his sons during the reign of winter evenings. Since the nights have lengthened and the field labors closed, I have read it with profit and delight, and I feel assured that other cultivators of the soil, both young and old, will reap benefit by following suit. The book is small and cheap and good. If the reader do not understand all that its pages contain, it will nevertheless cause him to reflect, to think deeply, and to inquire what he knows concerning the condition of agriculture in his neighborhood, its susceptibility and means of improvement. "To think," says a medical author, "is to theorise." Therefore he who thinks and acts, puts theory in practice. We are all more or less theorists, whether we be of the Knickerbocker stamp, obstinate and unchangeable, and haters of book farming; or whether we yield to the impulse of the times and seek for improvement with the advance of the arts and sciences. The old fashioned unchanged farmer, thinks and theorises upon the ancient method of his forefathers, and determines that method to be the only true and correct one. He is unwilling to read, to study, or be instructed in the art he has long practiced. Dr. Rush† says that persons in a state of derangement often reason correctly, but upon false premises. So some of the old farmers are like monomaniacs, so set in their own way that they think agriculture requires no aid from books or periodicals, and that it requires no alteration or improvement. Let us then call upon the young to read and to study the science as well as the art of agriculture.

Here then is one of the books for them. It is entitled "*Familiar Letters on Chemistry, and its relation to Com-*

* This "hasty sketch" has never been received.—Eps.

† Rush on Diseases of the Mind.

merce, Physiology and Agriculture. By JUSTUS LIEBIG, M. D. Professor, &c." This is a late work of the celebrated author of "Organic Chemistry in its applications to Agriculture and Physiology," so often spoken of with deserved praise in the pages of the Cultivator.

These letters are sixteen in number, and we recommend them to attentive perusal. They are contained in a small duodecimo volume of 170 pages, price twelve and a half cents, or bound in boards 25 cents. Cheap enough in all conscience.

"The letters contained in this little volume," says the author, "embrace some of the most important points of the science of chemistry, in their application to natural philosophy, physiology, agriculture and commerce. Some of them treat of subjects which have already been, or will hereafter be, more fully discussed in my larger works. They were intended to be mere sketches, and were written for the especial purpose of exciting the attention of governments, and an enlightened public, to the necessity of establishing schools of chemistry, and of promoting, by every means, the study of a science so intimately connected with the arts, pursuits, and social well-being of modern civilized nations."

"For my own part, I do not scruple to avow the conviction, that ere long a knowledge of the principal truths of chemistry will be expected in every educated man, and that it will be as necessary to the statesman and political economist, and the *practical agriculturist*, as it is already indispensable to the physician and manufacturer."

"In Germany, such of these letters as have been already published, have not failed to produce some of the results anticipated. New professorships have been established in the Universities of Gottingen and Wurtzburg, for the express purpose of facilitating the application of chemical truths to the practical arts of life, and of following up the new line of investigation and research—the bearing of chemistry upon physiology, medicine and agriculture,—which may be said to be only just begun."

"It only remains for me to add a hope that this little offering may serve to make new friends to our beautiful and useful science, and be a remembrancer to those old friends who have for many years past, taken a lively interest in all my labors. [Part of author's preface, p. 6.]

These interesting and readable letters of Liebig contain a continued argument in favor of the application of chemistry to the arts. Among them are some strong and striking illustrations which we would be glad to extract, but we must confine our observations to the agricultural part.

"Agriculture is both a *science* and an *art*. The knowledge of all the conditions of the life of vegetables, the origin of their elements, and the sources of their nourishment, forms its *scientific basis*."

"From this knowledge we derive certain rules for the exercise of the *art*, the principles upon which *the mechanical operations of farming depend*, the usefulness or necessity of these for preparing the soil to support the growth of plants, and for removing every obnoxious influence." [Letter 12th, p. 125.]

The remainder of this letter treats of the "Necessity of Chemistry, Rationale of Agricultural Processes, Washing for Gold." It concludes with a happy illustration of sowing or planting, and reaping for a series of years without manure, until crops fail, as in certain cases the washers for gold, eager to get all, wash and rewash the same sands, obtaining less every time, until they realize nothing to compensate for their labor.

The 13th letter treats of the illustration of the necessity of chemistry to advance and perfect agriculture—Manner in which fallow ameliorates the soil—Uses of lime—Effects of burning—Of marl.

On the action of lime we make the following extract: "Common potter's clay, or pipe clay, diffused through water, and added to milk of lime, thickens immediately upon mixing; and if the mixture is kept for some months, and then treated with acid, the clay becomes gelatinous, which it would not have done without the admixture with the lime. The lime in combining with the elements of the clay liquifies it; and what is more remarkable, liberates the greater part of its alkalies. These interesting facts were first observed by Fuchs, at Munich;

they have not only led to a more intimate knowledge of the nature and properties of the hydraulic cements, but what is far more important, they explain the effects of *caustic lime upon the soil*, and guide the agriculturist in the application of an invaluable means of opening it, and setting free its alkalies—substances so important, nay, so indispensable to his crops."

"In the month of October, the fields of Yorkshire and Oxfordshire, (in England,) look as if they were covered with snow. Whole square miles are seen whitened over with quick lime, which during the moist winter months, exercises its beneficial influence upon the stiff clayey soil of those counties."

"According to the humus theory, quick lime ought to exert the most noxious influence upon the soil, because all organic matters contained in it are destroyed by it, (the lime,) and rendered incapable of yielding their humus to a new vegetation. The facts are indeed directly contrary to this now abandoned theory; the fertility of the soil is increased by the lime." (Page 136.)

We had marked several other pages for notice or extracts, but our space is limited and we must hasten to a conclusion, again recommending it to young farmers, hoping they may receive as much pleasure as the writer has in its perusal.

A PRACTICAL FARMER.

Staten Island, Dec. 23, 1843.

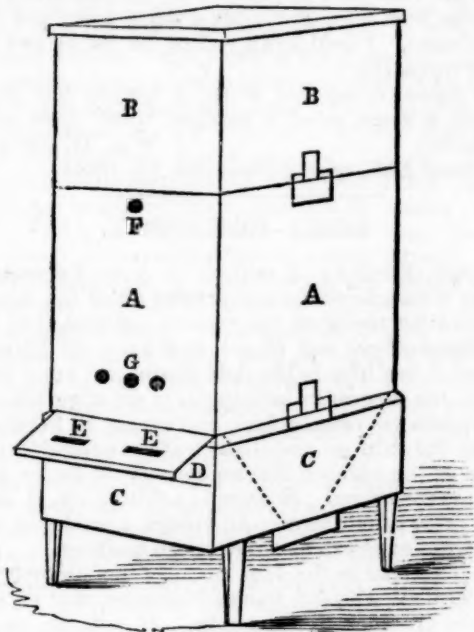
THE VERMONT STUMP MACHINE.

MESSRS. GAYLORD & TUCKER—As your correspondent "M. A." cannot understand so simple a machine for stump pulling as the one of which I sent you an account, I hope in this article to explain his difficulties. When I wrote you first, I was building a machine on a small scale; wheel 12 feet in diameter, height 8 feet, breadth 10 feet; calculated for two horses to work among small hard wood stumps, which had been cut 4 years. I have had it in operation a good while, and I assure you it beat my expectations. If "M. A." is going to build one, let his shaft be the stiffest and toughest stick of second growth white oak that he can get; let the gudgeon fit the hole in the post as exactly as possible, consistently with its turning freely, and at the foot of the posts, instead of "firmly morticing them into the sills," let the tennon be round, about 4 inches in diameter, and not pinned; the weight will keep it in its place. This will allow the post to turn a little on the sill, and thus keep it from splitting, and the gudgeon from breaking. He must also have two good iron bands around the top of each post, one above and one below the gudgeon, and the same on the end of each gudgeon outside the posts. In drawing a stump, your machine must be directly over it, so that the chains will draw plumb. If there is any elevation or unevenness in the ground, *have the same end of both sills raised or lowered alike, and never one sill higher than the other.* He must have a notch in the outside of the posts, about 7 feet from the ground, and if a little cramping is unavoidable, let him put a pole or rail with one end stuck in the ground, and the other in this notch. He must not use frisky cattle at moving the machine, for if one team should stop and the other keep on, some mischief would follow. The machine of which I sent a description, at first sight seemed to me to be the most rickety shackling old concern I ever *did* see. Its creaking could be heard a mile; it swayed over from one side to the other with great violence. The wheel was crooked and twisted out of shape, and it would stand as much cramping, twisting and straining as any thing I ever saw. Yet it would raise a weight of 100 tons, and stand all that three yoke of cattle could draw. If "M. A." intends to build a machine, and follows my directions to the letter, I will warrant him a good, substantial and effective implement, which will neither "crush to the ground" nor "split in the post." It will not work, however, on a side hill, but only on level ground and gentle declivity.

H. T. C.

Burlington, Vt., Dec. 11, 1843.

N. B. If "M. A." or any one else, builds a machine, I should like to be informed of their success through your columns.



BEE HIVE.—(Fig. 20.)

MESSRS. GAYLORD & TUCKER—I send you a plan and description of a bee hive which I have constructed during the past season, and which I conceive possesses some advantages over any I have seen. If any others are of like opinion, they are at liberty to use it. It may be used as a chamber hive, or on the subtended plan, at the pleasure of the apirarian.

A. A.—Body of the hive 16 inches square on the outside, and 12 inches high, made of inch boards.

B. B.—Upper apartment, 8 inches high. This may be made separate from the lower part, as in the figure, or both parts may be made together, as in the Vermont and other chambered hives.

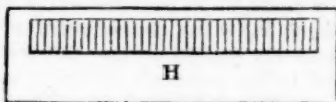
C. C.—Base or protector, 6 inches high, and 17½ inches square; the part projecting beyond the hive, being sloped off to prevent water from running under the hive; made of 1½ inch boards.

D.—Lighting stool for the bees.

E. E.—Entrances for the bees, 2 inches wide and one quarter of an inch high.

F.—Ventilator immediately under the chamber floor, to permit the escape of impure air, and cause a slight but regular current of air through the hive. This hole must be covered with a wire screen.

G.—Holes to correspond with holes in the feeding box, which may be hung on the front of the hive when it is necessary to feed the swarm. These must be kept closed at all other times.



H.—Screen to slide in a groove under the protector. The spaces between the wires one-tenth of an inch.

In the inside of the protector are two inclined planes meeting within 1½ inches at the bottom, leaving an open space to correspond with the open part of the screen, (H.) This position of the inclined planes is represented by the dotted lines in the figure. This opening may be entirely or partially closed by the screen board, or the board may be entirely withdrawn, so that the dead bees, &c. may fall out. As soon, however, as the season for the moth arrives, and till he disappears in the fall, the screen should be used as a barrier to prevent her entrance. A strong swarm will keep the entrance in front so guarded that the moth will seldom gain admittance there, and if she does enter, every part of the hive being planed smooth, the joints all perfectly closed, and the inside of the protector well whitewashed with lime and salt, she will find no place to deposit her eggs unless there be some exposed comb, which should always be guarded against. The body of the hive, chamber and

base, should be dovetailed together, and nailed each way, and the lower edge of the hive should be chamfered off on the inside to half an inch thick.

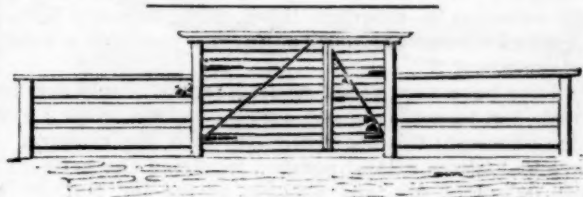
Boxes of any shape or size may be put in the chamber, having apertures to correspond with those in the chamber floor; or when the hive is filled it may be raised and another set under it, as in the common subtended hive. As the bees enter about 1½ inch below the body of the hive, they pass through a canal 3 or 4 inches long, before they are fairly within the hive. This gives them complete power to defend themselves against robbers, as well as the moth. Ants may be kept from the hive by strewing a little pearlash around the feet, or they may stand in shallow vessels containing the pearlash.

The above plan furnishes as complete protection to the bees against all their enemies as could be desired, at the same time it furnishes as complete facilities for removing honey, &c. as any other hive. Objection will probably be made that it is too expensive. It is true, that a good hive cannot be made for much less than \$2; but as it will last an age, and as a good swarm in a single year will commonly make surplus honey to pay for the hive, it will be cheap in the end.

P.

Bowling Green, Wood co., O., 1843.

N. B. In my drawing I have set the feet on the front and rear of the base; they should be on the ends, so as not to interfere with the screen, which should slide in from the backside.



A GATE.—(Fig. 21.)

MESSRS. GAYLORD & TUCKER—Having noticed in the Cultivator several models for gates, it occurred to me whether the gate I have just finished at the entrance of my grounds near my house, might not furnish some new hints for you. I have given a very awkward sketch of it below, from which perhaps you may understand that the large gate, when shut, so rests upon the posts at each end, as to render it impossible for it ever to sag. So when open, it rests upon a short post in the ground.

The small gate, you perceive, hangs upon the high post, and shuts against the upright edge of the large gate, and swings in such a manner that the top piece of the large gate will swing over it. It will be found that the two gates will interfere least with each other, if they should be made to swing different ways. The gate should be finished whole, and then sawed off; the right hand post on one side horizontal half through, and on the other side on a slant, so that the gate will easily rise and rest on the post, by slightly lifting it as it is shut.

Springfield, Mass., 1843.

J. WILLARD.

POUDRETTE.

THE expediency of using any of the compositions which are sold for manure, depends on circumstances which the farmer should always consider. Mr. Breck, of the N. E. Farmer, says he has used within the last two years, 75 to 100 barrels of poudrette. He says that where good stable dung can be had at three dollars per cord, it is no object to buy poudrette at present prices. He does not hesitate to say that it is excellent for corn, provided about half the usual quantity of green manure is plowed in in the spring, and the corn planted on the poudrette. The corn takes a vigorous start, and before the virtue of the poudrette is exhausted, the decomposition of the green manure begins to take place, and affords nourishment for the numerous roots which are greatly multiplied by the action of the poudrette. If the ground is not in good heart, Mr. B. says the action of the poudrette alone is not sufficient to mature a good crop, although it may give a very flattering appearance in the first part of the season.

HEREFORDS AS MILKERS.

MESSRS. GAYLORD & TUCKER—Probably you will say I am too frequently addressing you on the subject of Herefords; but you are aware of the prejudice I have had to contend with against a combination of some Short Horn breeders, to a solitary individual breeder of Herefords. My stock heretofore have not been in a situation for criticism, but I think they are now just what cattle should be. I state this with "*feeling pride*" and *without vanity*. I am highly gratified with the breed, and have not the slightest wish to exchange for any other.

Much has been said against their milking properties *without the least foundation*. I do not desire better cows for the pail than the eight just calved; one does not vary a quart more than another. The following is a statement of the butter made, and I am feeding their calves on the *skim milk*.

I do not know a better mode of bringing these facts before the public in the most satisfactory manner, than in requesting their strongest opponents to see and judge for themselves, and give them, *impartially, their just due*. Therefore I beg to say through your paper, that I shall be most happy to invite Messrs. Randall and Hepburn to stay a week with me, or as much longer as their convenience will allow—my cows and dairy shall be open to their inspection. If the Hon. Henry Clay will accompany them, or any other breeder, not forgetting my contemporary Mr. Thos. Thompson, Prospect Farm, Pa., I will endeavor to entertain them, with farmer's fare, a *pitcher* of "home brewed," and assure you with a hearty welcome.

I have been very much *amused*, (some would say annoyed, but to me it did not amount to the latter,) ever since I brought this breed of cattle into the country. I have had *letters without number*, inquiring the price of a bull, or a pair, &c. and without *paying the postage*; to which I replied, and there ended the correspondence. Six calves out of the eight abovementioned, were bulls, and six better bred ones could not be produced; I have kept my determination and made steers of them. I have now two two year old bulls and two yearlings for sale; the price will vary from \$150 to \$250, and if I cannot obtain that amount, I will make "*stags*" of them, therefore your readers know as much about the *price* as if they wrote me *twenty letters*. It is not my object to accumulate a fortune out of this business. I care as little for wealth as any man; but I feel assured my stock will in due time cancel the obligations I am under to my friends and supporters, which is my greatest care and anxiety. More than that, it has kept my *mind active*, and my *hands employed*, two of the greatest blessings; and I am happy to see my stock in such a situation to suit my purpose. The *butcher* and the *butter market* will do all I want.

I have just commenced feeding *Eliza*, my only half bred cow, (half Short Horn and half Hereford,) and I will show her at the next Fair, but not for a premium, so that the public may be able to judge what the half breed will do for the stall. She was an excellent milk-er, probably as good as any cow in the herd. I shall milk this season, twenty-three full blood cows and heifers, and I have now on hand just sixty of all ages, bulls, cows, steers, heifers and calves, and shall have fifteen more calves before the 1st of May, if all goes well.

I am feeding my cows on the fodder of Indian corn, from a crop sown broadcast, cut fine with a machine, with one feeding of hay at night, and half a bushel of brewer's grains (cost 6 cts. per bushel,) to each cow per day. I submit a statement of the amount of butter made from the 5th to the 11th of Jan. We had the milk of

Lucy, 4 yrs. old, calved Nov. 28,	7 days.
Martha, 8 yrs. old, calved Dec. 28,	7
Catharine, 4 yrs. old, calved Jan. 2,	7
Victoria, 4 yrs. old, calved Jan. 4,	5
Spot, 4 yrs. old, calved Jan. 4,	5
Perfection, 4 yrs. old, calved Jan. 4,	5
Matilda, 3 yrs. old, calved Jan. 7,	2

Equal to the milk of one cow 38 days, and we had 48½ pounds of butter, *weighed in separate pounds*. Had it been weighed at once, the aggregate would have been some greater; but this gives as an average, a *fraction over eight*

pounds per week for each cow. The statement is a literal transcript from Mrs. Sheldrick's *dairy book*, and can be duly attested. I send you a roll of the butter as a specimen of its quality.*

It is proper to say that when I bought this stock in England, I *never asked a question* about their milking properties.

WM. H. SOTHAM.

Hereford Hall, near Albany, Jan. 10, 1844.

SHEEP HUSBANDRY.

MESSRS. EDITORS—I noticed in your December no. that my views heretofore expressed about the feasibility of cultivating sheep on the western prairies, has waked up, among others, our friend ROBINSON of Illinois. I am glad to see him in the field again, and hope he may have all the success he anticipates in growing wool. Our Vermonters yet remain firm, and cannot be persuaded to give up the ship yet awhile to western competition. We remain of the opinion that no country is better adapted than ours for sheep. If there is a falling off, it must be in the price of our farms; all things considered we can grow wool as cheap as our western brethren.

I also noticed in the Jan. no. a communication from H. S. Randall, Esq. on Paular Merinoes, that he had introduced my flock to the public. It will be proper to state that "Fortune" was bred by Tyler Stickney. He was got by a Jarvis buck, but his qualities partook more of the superior ewe from which he was dropped, a pure descendant of the Col. Humphrey importation in 1810. She died at the age of about sixteen years; her fleeces, when in her prime, averaged over seven and a half lbs. of cleansed wool; very prolific and hardy, which is one qualification of this breed, and may be shown by her raising a lamb this last season. By her wool, and form also, every mark of the Paular family was fully developed. The price I paid Mr. Wilson for the buck, is correct; I also purchased all of Fortune's stock that could be had at any reasonable price. These, with what I have raised from his getting, I have been able to supply many orders to the satisfaction of those who now have them.

I have seen an article in one of our papers, ridiculing the idea advanced by the Cultivator, "that the age of sheep may be known by the horns." That statement in the Cultivator is correct. The ring on the horns will tell the true age much better than it can be known by the teeth.

S. W. JEWETT.

Weybridge, Vt., Jan. 8, 1844.

WHEAT vs. CHESS.

MESSRS. EDITORS—While I rejoice at every advance in the practice or the science of agriculture, I experience a proportionate regret at every retrograde movement, or inculcation of error, especially if made in an imposing form, or coming from a source from which farmers have a right to expect better things. Without intending to open anew the chess controversy, which can only be permanently settled by the farmer adopting the same course with that weed which he pursues with other pests, viz: sowing no seed of chess, and carefully pulling and eradicating all such as may accidentally appear, I wish permission to express my surprise at finding in R. L. Allen, late one of the editors of the "Agriculturist," and a frequent contributor to that journal, a strenuous advocate of that exploded heresy. In that paper for November, is an article insisting that wheat turns to chess, and presenting what he calls an array of facts to confirm his position. Now there is not one of the "facts" there presented which is not evidently founded on mistake, or which is not capable of an easy solution, on principles that do not involve an absurdity, or a contravention of the well known laws of nature. There is not one of them that has not been conclusively refuted again and again; and any person, who after reading the papers of David Thomas and others, in the old Genesee Farmer, will revive, and endeavor to sustain such a pernicious

* The sample sent is in appearance (we have not yet tried it,) fine, the color and consistence being as good as that made in June or September.—Ers.

doctrine in agriculture, cannot, I think, have well considered the downward tendencies of error. It is certainly a most curious "fact," that if the theory of transmutation is correct, not a single instance has yet been adduced, not a single specimen has been exhibited, that would stand the test of a rigid scrutiny. If the doctrine that wheat turns to chess is well founded, it is one of which thousands of illustrations are presented every year, and yet strange to tell, of the multitudes of stories told and facts asserted, not one, no not a solitary one, has passed that ordeal of investigation to which all such matters should be subjected, without having its fallacy and unsoundness so exposed as to put to the blush those who have presented them. How many roots from which both wheat and chess are said to have grown have been shown; how many ears of wheat of which part were wheat and part chess, have been exhibited or reported, yet which thorough examination showed furnished as little support to the theory of transmutation, as any other stuff that dreams are made of. But I do not so much object to this theory on account of its palpable unsoundness, its contravention of the known laws that govern vegetation, and its direct contradiction of inspiration, as on account of the bad effects it must have on the farming of all who embrace it. If I believe that wheat will turn to chess, cockle, or steinkrout, what inducement have I to keep fields free from these pests; what advantage in endeavoring to use none but clean seed? I condemn the doctrine as a premium for slovenly farming; as a theory which if fully carried out, would do more to lessen the prosperity of western New-York, reduce her wheat crops, and destroy their value, than her worst enemy could in any other way devise. I repeat I am sorry that a gentleman so well known and so much respected as Mr. Allen, should have made such an "advance backward," and been found among the supporters of what I consider an agricultural heresy of the first magnitude.

A CAYUGA FARMER.

"FIRST YEAR AT FARMING."

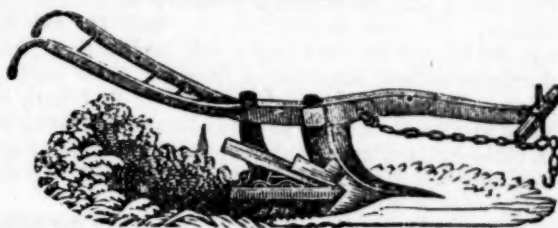
From a correspondent who signs "Marion," Ohio, we have received a letter, detailing at some length the experience of his "first year at farming," from which we give the following extract:

"My farm is a rich vegetable soil of over 2 feet in depth. I spread on about three acres of it 54 loads of stable manure (well filled with timothy seed) last spring, and harrowed it in; but I cannot see that the manure has added to the richness of the soil: a stranger could not point out the three acres. Where I put manure on the woodland it did well. Growth, oak and hickory; stiff soil, and after going 3 to 5 feet in depth underlaid with great thickness of lime stone; (so with the prairie.) Quere—Is not the lime stone too deep to benefit the crops? The strippings of my quarry nearest the rock, when exposed to the air soon falls, lays light, and effervesces when tried with acids. Would this pay expenses of applying it to crops, either on wood land or prairie? I can make lime for 6 cents a bushel, and can get stable manure delivered, at 31 cents a load. Which is cheapest and best? Will fresh lime from the kiln, put on prairie in its natural state, 40 to 50 bushels per acre, kill out the wild grasses and weeds, and bring it into timothy and white clover? I have got up and sold about 1600 perch of limestone this season. The spalls and offal I throw into a kiln, and in 48 hours burn near 400 bushels lime. The village, near by, can furnish 300 to 500 loads manure for the hauling cost of 25 to 31 cents per load; but I do not see that it benefits the prairie at all. I can and will make lime if you think it advisable. I have 250 acres enclosed. The prairie furnishes good pasture, and plenty of stock off on pasture."

We have no doubt that one reason, and perhaps the greatest one, why the manure did not operate favorably on the prairie, is, that the land is too wet—and this, we think it probable, accounts for the different effect produced on the timber-land, that being drier and warmer. On very wet and cold lands, manures lie latent or inactive.

As it regards the expediency of using lime, we would

say, *make the experiment*—for where lime can be made as low as six cents a bushel, not much risk or expense is incurred, surely—and the result may indicate the proper course for the future. After all that has been said about lime, we consider its *modus operandi* not well understood, and we should decidedly prefer being guided by *experience* rather than *theory*. We should, however, be strongly inclined to the opinion, that either lime, or the decomposing lime-stone, would tend to ameliorate the soil described by our correspondent. We dare say his good judgment will soon teach him whether it will be most profitable to use lime or stable manures, or in what proportions he had better use each. The fact that the manure can be had for the *hauling*, and that it will only cost 25 to 31 cents a load when delivered on the ground, is important. There are many other situations in the west, where manure may be had in any quantity, on as low terms as is here mentioned, and in using manures, or making experiments on new ones, this matter should be borne in mind. In conclusion, we presume "Marion" has only to take care to drain off the surplus water from his lands, both by ditching and opening and rendering more loose the sub-soil, and using the means which seem to be readily at hand for improvement, to make himself a farm to his liking.



RUGGLES, NOURSE & MASON'S SUB-SOIL PLOW.

MESSRS. EDITORS—We take the liberty to forward you a cut of the sub-soil plow, as now made by us. This plow is generally used to follow in the furrow of the common plow, breaking and crumbling the sub-soil to any desirable depth, by raising it gradually upon the incline plane, and dropping it again in its place, which allows roots to penetrate deeper, and in very retentive soils, or in wet seasons, the surplus waters will readily pass downwards, and on lands where vegetation is likely to suffer from drouth, by thus loosening the sub-soil admits the natural moisture to ascend and become useful to vegetation.

In —, at the suggestion of many eminent farmers, we imported from Edinburg in Scotland, one of Smith's Deanston Sub-soil Plows, at an expense of \$80—that being the kind most approved and used in England and Scotland. That we believe to be the only plow of the kind ever brought to this country. It was made wholly of iron except the upper end of the handles, and being very long, heavy and complicated in its construction, it was expensive much beyond what the agriculturists of our country would believe necessary, or think they could generally afford. Since that time, we have been testing their operation and utility, through the farmers in different sections of the country, and find their effects to be most beneficial, equal even to the expectations of the most sanguine—and the demand fast increasing. We have so modified and simplified its construction, yet retaining all the principles and adding some important improvements, that we afford a plow for \$15, that is capable of doing the same and as good work as the original, and with the improvements, they are better adapted to be used in different soils requiring different depths. They were originally intended only to follow the common plow, but as made by us they have been successfully used in grass lands without first using the common plow, breaking the sub-soil without turning up the sward, and without disturbing it more than was beneficial. (See advertisement.)

RUGGLES, NOURSE & MASON.

LARGE FLEECE.—Mr. SAMUEL PATTERSON, of Murfreesboro, Tenn., informs us that he sheared from a two year old Bakewell buck, from the importation of Jas. E. Letton of Kentucky, fifteen and a quarter pounds of wool, free from burrs.

CULTURE OF FRUIT.—No. II.

GRAFTING.

ONE of the most important operations in the culture of fruit trees, is the propagation of varieties by *budding* and *grafting*. By means of these we exchange the unpalatable fruit of the wilding for the most delicious productions which art and nature combined have been able to furnish. And there are few gardens or orchards which might not be greatly improved by the introduction of the best varieties, the cultivation and care of which cost no more than that of the most worthless.

Budding and grafting have their respective advantages and disadvantages. Budding requires less skill and care, but needs the subsequent attention of removing the ligatures, and heading down the stocks. Grafting does not need this subsequent care, but more skill is requisite in the operation. The peach and nectarine can rarely if ever be propagated by grafting; and budding cannot be performed on large and unthrifty stocks, which may often be successfully grafted.

Books on gardening describe many different modes of grafting; but the multiplicity of these often more bewilder the learner than instruct him. By understanding the *essential* requisites, the operation is at once simplified, and it may be varied at pleasure without danger of failure. The two chief points are, *that the sap flowing upward through the stock pass freely into the graft, and that it returns without interruption from the inner bark of the stock*. To secure these both the wood and bark in the stock and graft, must be so cut as to admit of being placed in close contact, and when so placed, the line of separation between the bark and wood should, on one side at least, exactly coincide in both.

The most common and useful modes are the *whip* and *cleft grafting*. Whip grafting is adopted where the stock and graft are of nearly equal size. To perform it, the stock and graft are cut off obliquely with an equal degree of slope, so as to leave two smooth straight surfaces which may be brought into close contact. A transverse cleft with the knife is to be made near the middle of each of these surfaces about one-third of an inch deep, so that when they are pressed together, the tongue and slit thus made in each, may mutually and firmly interlock. It is then usual to bind them to their place with bass or corn husk; but it is better to have the jaws of the cleft in each so firmly pressed together as to render this unnecessary. The whole is then to be closely wrapped in a grafting plaster.

Where the stock is more than half an inch in diameter, cleft grafting is preferable. The stock is first cut off horizontally, and a split made in it at the middle of the cut surface an inch or two in depth; in this the graft, cut wedge-like, is inserted. To do it properly, it is requisite that the graft be so cut as to fit the split as nearly as possible, which is to be opened by a wedge on the side opposite from the place for the graft, and that the jaws of the stock be strong enough to press the sides firmly and closely. After this, the plaster is applied.

It is convenient, in grafting, to have two knives, one chiefly for cutting, and the other very sharp, for smoothing the surfaces for contact.

All the branches and buds on the stock, must be carefully removed, that the sap may all go to the nourishment of the graft. Failure is often caused by a want of this care.

In heading down old trees, it is a common practice to graft into the large branches; it would be much better to cut off those branches, and to graft or bud into the young shoots which spring up in their places.

The practice of using clay to cover the wounds, is now nearly superseded by the far neater and better mode of applying plasters of Grafting Wax. These are made the most readily and cheaply by spreading the warmed wax over a sheet of unsized paper with a knife, or with a brush when melted, and afterwards cutting up into plasters of the requisite size. The best and cheapest wax is made by melting together one part of beeswax, two parts of tallow and four of rosin.

As grafting early in spring is generally preferable, (more especially for the *cherry*,) it becomes necessary in

cool weather to soften the wax by artificial heat. A kettle of coals, or a lamp, may be used for this purpose.

BUDDING.

Budding is always to be performed when the bark peels freely, which takes place when the stocks are in a rapidly growing state. Cherries and plums should always be budded by the middle of summer; apples and pears often continue growing rapidly a month later, and peaches may be done even as late as the commencement of autumn.

It is indispensable to successful budding, that the stock be thrifty, and the shoot in which the bud is inserted not more than a year or two old. No skill can succeed in old or stunted stocks. For the *cambium* or mucilaginous substance between the bark and wood, which hardens into the new wood, and which *cements* the bud to the stock, exists only in sufficient quantities for this purpose in fast growing branches.

Every bud is an embryo plant, and the object is to transfer this from one tree to another. To effect this, it is only necessary that the bud be cut smoothly from the shoot with a very small portion of wood with it, and inserted under the raised bark of the stock in close contact with the cambium. Provided the stock is thrifty and growing; the bud smoothly cut off, and closely and evenly applied to the stock; the cambium uninjured by removing the barks; and the bud be kept to its place a few days by a ligature of moderate pressure; it is of little consequence how the operation is performed, and there can be little danger of failure.

The common way of cutting the bark to remove it, is to make a transverse cut and longitudinal slit, just through it, like the letter T. The bud is then slid downwards under the bark, in the middle of the slit. The whole operation should be performed with as little delay as possible.

Whatever mode is adopted, the bark should always be *lifted* by placing the knife at the edge, and not by running it *under*, as this always injures the cambium.

After the bud is inserted, the whole should be covered, except the bud itself, with a ligature of moistened bass, corn-husk, tow, or other soft substance, bound round it with just sufficient force to press the bud closely on the stock.

In about two weeks, or as soon as the ligature begins to cut into the stock, it must be removed. Early the following spring, the stock is to be cut off a quarter of an inch above the bud, and in a direction sloping towards it, and all the branches and other buds carefully removed that the whole nourishment may go to its growth. Sometimes, (as in the apricot,) it is best to leave two or three inches of the stock above the bud, to tie the young shoot to, that it be not broken down by the wind.

Disappointment very often arises in budding the peach and apricot from the buds, though well set, being winter killed. This may be generally avoided by observing on the tree whence the buds are taken, on what part of the shoots the buds have withstood the preceding winter, and selecting accordingly. These will commonly be found to be the earliest formed buds on the thriftiest shoots.

Shoots cut for budding should always have the leaves removed as soon as they are taken from the tree, about a quarter of an inch above the bud. They may then, if needed, be preserved several days in damp moss or cloth.

Macedon, Wayne co., N. Y.

J. J. T.

GREEN PEAS IN WINTER.

THE editor of the "Maine Cultivator" says he saw not long since, "green peas as succulent to all appearance as they were when plucked from the vine some five or six months before." The mode of preparing them, is to pick when of the proper size for eating, shell, and carefully dry on cloths in the shade. All the care necessary, is to prevent their molding; this done they will be fine and sweet. Beans may be preserved in the same way, and with perfect success. If in addition, a stock of green corn is secured at the proper time, as it may easily be, by scalding on the cob when fit for roasting or boiling, and then cutting or shelling the corn from the cob, and

carefully drying in the sun, green peas, or beans, or our favorite *succatosh*, may be had the whole year, those who have never tried it, may be assured that a dish of the latter, in January or March, is a luxury.

CULTIVATION OF FRUIT AT THE SOUTH.

MESSRS. GAYLORD & TUCKER—My principal object is to call attention in the "Sunny South," to the raising of fruit—apples and peaches, especially—as I regard them as most valuable to us, and for the reason that they can be so easily raised. In doing so, I must admit that I have but little hope that I shall excite many to practice what I both practice and preach.

It is frequently urged as an objection to apples, that our soil and climate are not adapted to them—that we cannot raise as good fruit here as is grown in the north. This may be true in part, but in the present shape of the proposition, I am unwilling to admit that it is wholly true. That we do not, as a general rule, is undeniable.

A neighbor of mine has succeeded in raising very fine varieties of apples. He selected such varieties as he knew to be good, and planted his trees in the usual manner. He keeps his cattle and horses out of his orchard, and thereby prevents the mutilation of his trees. The consequence is, he has an abundance of delicious fruit from early summer to mid-winter. In an adjoining county, where much more attention has been given to orchards than in this, may be found proofs enough to satisfy the most incredulous, that it is a very easy matter to raise in this latitude, apples of the very best quality. That we shall fail to introduce some of the best varieties from the north, is altogether probable; but this constitutes no objection, inasmuch as we have enough that are already climatised, to give us a great variety if we would propagate them. In a short time I hope to demonstrate this truth by irresistible evidence, if seeing, smelling and tasting, be evidence of that character. At twenty-five feet distance, last February, I dug holes four feet in diameter and from fourteen to sixteen inches in depth. In each of these pits I deposited earth from the corners of the fence, (a rich mold,) sufficient to fill them within six inches of the top. Upon this I placed my trees after taking them from the nursery, without cutting or maiming the roots, in their natural position, giving to each root its full latitude by opening trenches when necessary, and then carefully placed the surface soil among the roots and pressed it down upon them until the pit was filled to a level with the surface. By this operation I have an orchard of three hundred apples, pears and plums, that are coming rapidly to maturity. Indeed, I believe that their growth has been more rapid the present year, than either of the two years they stood in the nursery. Now, I am very certain but for the *Cultivator*, I should never have grafted these trees, for they and those that I have since grafted, are the first and only ones I have ever seen grafted; and I am very certain that I could not have been so successful in transplanting, without following the general principles laid down in its pages.

In February, 1842, I transplanted six hundred—in the same month this year, seven hundred peach trees in the same manner, using no manure, and digging the holes only five or six inches deep. I have lost but four trees in sixteen hundred—one peach tree last year from the six hundred, and three this year from the seven hundred, which stood upon land entirely too wet for any plant that requires a dry soil. Now I call this successful operating.

Hancock co., Ga., Dec. 18, 1843.

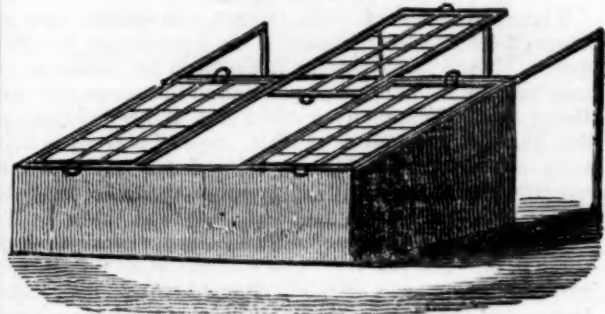
GEORGIAN.

RYE IN PEACH ORCHARDS.

A postscript to Mr. PHYSICK's communication, published in our Dec. number, was accidentally omitted, which is here given:

"It has often been remarked that rye was destructive to peach trees, and I once saw an orchard of about twenty acres go into decay immediately after a crop of rye. I do not believe that rye is any more injurious than other small grain, but the time of plowing for this crop is early in August; and according to one of my

experiments, the plowing of a peach orchard at that season will destroy the trees without the rye."



HOT BEDS.—(Fig. 00.)

EVERY farmer should have a hot bed, though the size may of course be regulated according to the amount of stuff which is to be grown. If a man only wants vegetables for his own use, he will find the expense of making a small hot bed well repaid, in the advantage derived from getting a supply of cabbages, lettuce, cucumbers, tomatoes, radishes, &c. several weeks sooner than they could be had if grown in the open air. For only growing plants for the use of a small family, any old windows may be used—they will do quite well while they last—but for operating on a larger scale, glasses calculated for the purpose should be used.

Hot beds may either be made entirely on the top of the ground, or partly below the surface: but as they require a great deal of moisture, it is better to make them partly below the top of the ground, because thus made, they do not dry up so quick. In making the bed, mark out the ground the size of your frame, and make an excavation to the depth of a foot, or if the ground is pretty dry, eighteen inches. Put in good horse manure, say two feet deep, and put on the frame and glass. When the heat is sufficiently raised, put on six or eight inches of good mold, that which has been made from clean grass sods which have been piled and become entirely rotted the year before, is best; and when this is warmed to the proper degree, which can easily be told by applying the hand to it, plant the seeds. When the sun shines, care should be taken that there is not too much heat; if there is too much, raise the glass; and while the plants are growing, as much air should be admitted as can be done consistently with keeping up the requisite degree of heat. See that the plants do not suffer for want of water, which should be pretty liberally supplied from a watering pot. If the weather should be so cold as to render it necessary, the bed should be protected by means of mats and straw.

In this climate, it is not thought advisable to attempt doing any thing with hot beds before the middle of March; but farther south they may be commenced earlier, according to the degree of latitude.

Those who wish for more particular directions for hot beds, can consult the seventh vol. of the *Cultivator*, p. 38.

The above cut furnishes a very good illustration of the proper proportions of a hot bed frame and glasses. The glasses are made to slide, and one of them is shown drawn back. It should face the south.

PEACH TREES.

MR. LEWIS SANDERS of Grass Hills, Kentucky, in a communication to the *Louisville Journal*, says he has found great benefit in protecting peach trees from the worm by the use of wood ashes. He scoops out the earth from about the root of the tree to the depth of 8 or 9 inches, and 18 to 24 inches from the tree. This is done about the first of September, and is left so till about the first of December, when the cavity is filled with leached ashes. Unleached ashes, we suppose, would answer the same purpose, in less quantity. Mr. Sanders says "by exposing the roots to the sun and air, the propagation of the worm is checked, it gives the birds (a particular kind of wood pecker,) a chance to pick them out."

Domestic Economy.

OLD BUTTER.

THE excellence of "old cheese" has passed into an adage, but butter that is good in *old age*, is not so often found. Made and cured as it ought to be, however, it may be kept a long time, and is none the worse for age. Being at Mr. Bement's the other day, and remarking the fine quality of the butter at table, inquiry was made how long it would keep? Mrs. B. replied that she had frequently kept it six or eight months—that she had just sent a jar to a friend in England, that was made in the early part of Sept. last—"but," said she, "we once kept some over *two years*." The circumstance was this; a roll of butter was by accident *dropped into the well*—after two years, the well was cleaned out, and the butter found. It was perfectly sweet and good—being *solid*, the water had not penetrated into or injured it at all.

PUMPKIN PIES.

A correspondent of the Northampton Courier says that much labor may be saved, and these pies be made better, by *grating* the raw pumpkin, instead of first stewing it, as is commonly done.

CHEESE FROM BUTTERMILK.

MISS NELSON, gives in the Journal of the Royal Agricultural Society, the process of making cheese from buttermilk, which she says was obtained from a person residing on Long Island in the United States. The contents of the churn were put into a pot and hung over a slow fire—the buttermilk became curdled, and the curd went to the bottom of the pot. The whey was then poured off, and the curd worked as other cheese, giving it salt to the taste, which will be about half the quantity usually given to skim milk curd. Put the curd in a clean coarse linen cloth, and hang it from the ceiling to dry for a few weeks, when it is fit for use. The linen cloth when hung in a net, gives a neatness to the appearance of the cheese. If a little bit of butter be worked into the curd, and the cheese kept for three or four months, it will be very good. Cheese can be made in this way on a very small scale, even from the produce of one cow.

GREASE SPOTS.

A correspondent of the Southwestern Farmer, who signs "J. E. W." gives the following as a good recipe for taking grease spots out of clothing, &c.

"Take the yolk of an egg, entirely free from the white, (be sure not to scald the egg,) and with a soft brush apply the mixture, and rub it on the spot until the grease appears removed or loose. Wash off the egg with moderately warm water, and finally rinse off the whole with clean cold water. Should not all the grease be removed, which may arise from being on a long time, or not sufficiently washed, dry and repeat the operation."

The writer of the above, says that a fine Merino shawl, which had been badly smeared with *tar* and *grease*, (gudgeon grease,) was perfectly cleaned by this process in a few minutes.

Veterinary Department.

MAD ITCH.

THIS is a formidable and fatal disease of cattle, mostly confined to the western states, its cause hitherto considered unknown, and medical treatment almost useless. In the October no. of the Tenn. Agriculturist, we find the following, which is deserving of consideration from the fact that the disease appears, so far as we have learned, only where cattle have been fed on stalks, or where that is almost their only food, as in the west. Cattle fed on cornstalks cut in a straw cutter, do not suffer in this way.

"GENTLEMEN—I know of but one remedy for the mad itch, and that is surgical. Open the second stomach and extract the cornstalks. This fatal disease among cattle is produced by cornstalks. The fibres being indigestible, hang in the *manifold* or *duodenum*, and irritate and inflame until the poor animal is driven to madness. Farmers feed their hogs upon green corn; the cattle follow and pick up the stalk chewed fine by the hogs, which

by superior sagacity he spits out, and this ready made article does all the mischief, and so it would serve the hogs or horses if they were to swallow it. Separate your cattle from your hogs in cornstalk chewing time, and you will separate your cattle from the mad itch. An ounce of prevention is worth a pound of cure. Farmer, this is the remedy. A BELIEVER IN PROPER REMEDIES."

PERIOD OF USEFULNESS IN CATTLE.

It is surprising how much longer some animals *hold out*, as the expression is, than others. Some fail and become valueless at eight or ten, and others are good at fifteen or twenty years. From what we have seen, we are inclined to think that the Durhams introduced here by Mr. Van Rensselaer, commonly called the *Patroon* stock, in many instances retain their faculties to a remarkable degree in old age. We consider this indicative of strong constitution.

While at Mr. Hillhouse's, he showed us the old bull AJAX, the illustrious sire of a long catalogue of *heroes*, whose successful contentions on many a cattle show field, are chronicled in the premium lists and annals of various agricultural societies. Among his distinguished offspring are *President*, *Leopard*, *Nero*, *Astoria*, and *Prince*, all celebrated prize animals.

Ajax is a large well made bull, now nearly *fifteen* years old, and like his sire, *Washington*, who died at *nineteen*, has retained in a remarkable degree the fine form and vigor of the prime of life. But he has lately been seized with a stiffness of the limbs, particularly in the lower joints of the hind legs, which for the present renders him nearly useless as a sire.

RAMS HORNS.

MESSRS. EDITORS—The *critique* in a late New-York paper, on some remarks in the August no. of the Cultivator, about the horns of sheep, is incorrect. Every farmer who has kept horned sheep, may have noticed that the annual growth of their horns, for *several* years—(perhaps not "to the end of their lives")—is shown by a rough ring, or wrinkle. The growth of young trees is marked by a ring or "joint," as some call it, somewhat similarly. This is, however, not an infallible criterion of the age, for ewes that have been early bred from will frequently appear a year older than others of the same age, but which did not have a lamb so early by a year. But the facetious author of that criticism, has made a great mistake; to make his ram "*fifty-one years old*," he has counted the *ridges* on his horns, instead of the annual *rings*.

JABAL.

Massachusetts, 1843.

COWS LOSING THEIR MILK.

A correspondent at Columbia, Pa., says he has had several cows dry up their milk in *one night* so entirely, that from having given a good quantity, they gave none of any consequence. He conjectures it was occasioned by their eating potatoes, which in his neighborhood, are this year very unsound.

We hear great complaints of a "disease" in potatoes in the quarter where our *food* lives—some accounts state that the death of animals had been occasioned by these defective or diseased potatoes—and we think it not unlikely that they may have occasioned the trouble with the cows, especially if eaten in large quantities.

CURE FOR FOUNDER.

A friend at Zanesville, Ohio, has sent us the following recipe: "Bleed freely in the neck, say from one to two gallons, and drench with strong decoction of sassafras tea—one or two quarts. If the horse is not relieved, repeat the drench in six hours. Let his drink be weak sassafras tea. The above will act like a charm; in nine cases out of ten, a perfect cure will be effected in twelve hours at farthest."

BLACK LEG IN CALVES.—Our correspondent, Wm. McCoy, Esq. of Pendleton county, Va. will find some cases of the successful treatment of this disease, detailed in this paper for last month, p. 23. He will also find in the previous vols. several articles on the subject.

PRIZE BULLS AND CALVES.

THE subscriber offers for sale two full blood Devon Bulls, which obtained the First Prizes offered for Devon Bulls, at the Baltimore County Agricultural Fair, held on the 19th and 20th October last, viz: Richard, 2 years old last spring, at \$50; Marmion, one year old last June, at \$50. Also: 3 full blood Devon Calves, got by the celebrated bull, Waverly. They are large and perfectly formed, and are 6, 8, and 10 months old at this time. Price—\$40 each. They are of a suitable age for shipping to the South. Address

JOHN P. E. STANLEY,
50 S. Calvert, Corner of Lombard st.
Baltimore, Md. Feb. 1, 1844—2t.

WORCESTER EAGLE AND SUB-SOIL PLOWS.

THE subscribers continue to manufacture at Worcester, Mass. their celebrated Eagle, Improved Eagle, and other forms and sizes of Plows, adapted to all the different sections, soils and uses of the country. Also, the Improved Sub-soil Plows, (see notice in Jan. No. of Cultivator, p. 19.)

The prices of Sub-soil Plows are from \$8 to \$15, according to size and fixtures, and may be seen at our Manufactory at Worcester, and at our Agricultural Warehouse, Quincy Hall, Boston—also at the store of Messrs. Pruyn, Wilson and Vosburgh, State street, Albany.

For sale at the FACTORY, and at their AGRICULTURAL WAREHOUSE AND SEED STORE, Quincy Hall, Boston—where may be found an unequalled assortment of Agricultural and Horticultural implements and seeds.

Very liberal discounts to dealers.

Jan. 15—1t.

RUGGLES, NOURSE & MASON.

LANGDON'S CULTIVATOR.

THE HORSE HOE OR CULTIVATOR PLOW, is an implement constructed and patented in 1842, by Barnabus Langdon of Troy, an old and experienced mechanic. After much labor and practical experiment had been bestowed upon it, it was exhibited for the first time at the State Fair held at Albany, and also at the Rensselaer Co. Fair, of that year, and received a premium at both.

There has been a large number made and sold the past season, and they have been thoroughly tested in various ways by some of the best and most experienced agriculturists in this and the adjoining counties, and in the vicinity of New-York, and all testify to their utility and usefulness, and to their superiority over any implement of the kind in general use. They not only do the work more effectually, but in much less time, and at one half the expense of any other Cultivator now in use, which are three important items, in these times of general low prices for agricultural productions. This Cultivator was exhibited at the last Fair of the American Institute, and received a premium. Much attention was bestowed upon it by Southern planters, and a number of them were sold by Mr. Langdon to go South, for working in corn, cotton, and tobacco. The Cultivator Plow is an implement made for weeding and loosening the soil between the hills of corn, potatoes, peas, beans and all root crops.

When weeding, half hilling, or splitting down corn hills, the weed cutters are always to be used, as represented in figure No. 1.* This operation cuts up the weeds, loosens and pulverises the soil completely up to the hill, and by cross plowing there will be little left for the hand hoe to do.

When the crop requires more earthing or hilling than the weed cutters can do, they are to be taken off and the mould boards are to be put on, as represented in figure No. 2.*

Both occupy the same position on the plow, and both are secured to the standard by one bolt. The mould boards throw a beautiful furrow each way, thus doing the work in one half the time of an ordinary corn plow.

For digging potatoes, or root crops, this implement is unrivalled. When used for that purpose, the weed cutters should be on, and the plow should then be drawn by a double team; direct the plow under the middle of the hill, just deep enough to raise the crop to the surface, which it will do in a most expeditious and workmanlike manner. The Cultivators are made of the best materials, fitted up in the best manner, with share, weed cutters, and mould boards ground bright, ready for immediate use. The price of the implement is \$8 at retail, and a fair discount made to dealers in agricultural implements. Orders addressed to BARNABAS LANGDON, or MOWRY & VAIL, 127 River st. Troy, (his authorized agents) will receive immediate despatch. They are also for sale by Ruggles, Nourse & Mason, Boston; John Mayher & Co. New-York; Pruyn, Wilson & Vosburgh, Albany; J. N. Woolley, Poughkeepsie; and E. Gifford, Hudson.

The testimony of C. N. Bement, Esq:—

Among the new implements exhibited at the State Fair last fall, none seemed to attract the attention more, or appeared to meet the views of the multitude better, than the Horse Hoe or Cultivator Plow, exhibited by Mr. Barnabus Langdon of Troy.

It affords me great pleasure to have it in my power to speak of the merits of this implement from experience, having used one the past season in my corn. My corn ground was laid off in squares, planted in the corners, leaving the hills three feet apart, which enabled me to run the Horse Hoe both ways. The edges of the share being sharp, cut up the weeds, which, with the soil, passes over the cutters, and leaves the soil very light and loose.

The breadth of the share is sufficient for rows of three feet wide, as it loosens and breaks up the soil beyond the reach of the share, and after passing through the crop both ways, there is little left for the hand hoe to do.

It is a very efficient implement, and I have the testimony of a number of farmers and gardeners who have used it, who all speak in the highest terms of it. I did not try it for digging potatoes as my crop was on a side hill; but those who did try it, say it exceeds any thing of the kind which has been introduced for that purpose. Three Hills Farm, Albany, January, 1843.

Feb. 1, 1844.

MOWRY & VAIL, Agents,
127 River-street, Troy, N. Y.

* These figures are necessarily omitted, owing to the room they would occupy.



BURRALL'S PATENT WHEEL PLOW.

THIS is a new article, having, instead of the common landside, a wheel in its place, which receives nearly the whole weight of the plow and pressure of the furrow, and is found on thorough and repeated trial to save more than 30 per cent. of the draft. It also lightens materially the labor of the plowman, especially among roots and stones, and on rough land. It runs lighter, wears better and keeps in repair longer than the common plow, and is in all respects, a valuable acquisition to the farmer.

PLOWS of various kinds, in best style.

THRASHING and CLOVER MACHINES, &c. &c.

Steam Engines, Water Wheels and Mill Gearings.

THOMAS D. BURRALL,

Feb. 1—1t.

Geneva, Ontario Co. N. Y.

FARMS TO RENT ON SHARES,

AND

BOARDING HOUSE TO LET,

IN the immediate vicinity of Saratoga Springs, Saratoga co., N. Y.—The subscriber has three valuable improved Farms, comprising about 430 acres in good cultivation and well watered, with three good farm houses and large and convenient out-buildings attached, which he would rent on shares on favorable terms, to good tenants, who are capable, intelligent and industrious farmers, and possess sufficient capital to carry on the farms to mutual benefit.

The proximity of these farms to the abovenamed village, (being about one mile distant,) in addition to their fine meadows, offer great advantages for conducting a large milk dairy, and the raising of garden vegetables and fruit. The throng of visitors during the summer months, affording a profitable market.

A Boarding House with every convenience attached and well furnished, favorably known to visitors as the 'Mansion House,' and well patronised for several years past, in the immediate vicinity of the celebrated "Union Spring." The house is capable of accommodating from 40 to 50 boarders, and would be connected with one of the farms at a low cash rent, or let separately to one qualified to keep a respectable establishment.

If desired, two of these farms may be united into one, to an enterprising farmer able to conduct both. Further description is deemed unnecessary, as applicants can obtain more information by letter or personal inspection. All communications with particulars as to present location, references, &c. postage paid, will receive attention. Address

H. H. LAWRENCE, Ten Springs.

Feb. 1, 1844—c. & m. 1t.

Saratoga Springs P. O.

PRINCE'S LINNEAN BOTANIC GARDEN & NURSERIES,

FLUSHING, LONG-ISLAND, NEAR NEW-YORK.

PRINCE'S New Descriptive Catalogues of the Linnean Botanic Garden and Nurseries, at Flushing, with very reduced prices, will be sent gratis to every postpaid applicant, and orders per mail will receive prompt attention. They comprise as follows, and the cost of publication was above \$100:

- No. 1, Descriptive Catalogue of Fruit Trees, Shrubs, and Plants.
- " 2, Hardy Ornamental Trees, Shrubs, and Plants.
- " 3, Bulbous Flower Roots and Dahlias.
- " 4, Green-House Shrubs and Plants.
- " 5, American Indigenous Trees and Plants.
- " 6, Garden, Agricultural, and Flower Seeds.
- " 7, do do in French.
- " 8, Wholesale Catalogue for Nurseries only.
- " 9, Catalogue of Roses, comprising above 600 varieties of every class.

WM. R. PRINCE & CO.

Flushing, Dec. 6, 1843. 2t.

POUDRETTE

OF the very best quality for sale. Three barrels for \$5, or ten barrels for \$15—delivered free of cartage by the New York Poudrette Company, 23 Chambers street, New-York. Orders by mail, with the cash, will be promptly delivered, and with the same care as though the purchaser was present, if addressed as above to

D. K. MINOR,

Dec. 1, 1843.—3t.

Agent.

COFFEE AND SPICE FACTORY.

ELIJAH WITHINGTON'S Coffee and Spice Factory, No. 7* Dutch Street, between John and Fulton street, New-York. E. W. manufactures and has constantly on hand and for sale, the following articles, viz:

Green Coffee, Roasted Coffee, Ground Coffee, Domestic Coffee, Prepared Cocoa, Mustard, Whole Nutmegs, Ground Cloves, Ground Cinnamon, Ground Pepper, Ground Alspice, Ground Ginger, Ground Cayenne, Ground Nutmegs.

☞ Coffee roasted and ground for Grocers. Roasting 50 cts. per hundred. Grinding, 50 cts. per hundred.

The above named goods are sold on the most reasonable terms, and delivered to any part of the city or Brooklyn, free of expense.

N. B. Cash paid for Mustard Seed.

Dec. 1, 1843.—3t.

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A VIRGINIA FARM FOR SALE.

WE have for sale, a farm on the East river, Mathews county, Virginia, near the Chesapeake bay, on salt water, 60 miles from Norfolk. This farm contains 170 acres land; the buildings are good and new, and sufficient to accommodate a large family; fish, oysters, and wild fowl at the door. Packets run regularly to Norfolk and Baltimore. It would suit a northern farmer, and it can be had for about what the improvements cost. If desired, several other farms can be bought in the same neighborhood. Address post paid, ARMISTEAD, DIGGS & CO.

Mathews Ct. House, Va., Feb. 1, 1844—11.

A BOOK FOR FARMERS,

MERCHANTS, Mechanics, Statesmen, Politicians, Lawyers, and the general reader. One of the most valuable works that has ever been issued from the American press, viz: Webster's Speeches, arguments in Court and Senate, Orations, remarks in Conventions and Senate, Reports, addresses before Agricultural Societies, Lectures, etc., by Daniel Webster—8th edition, 3 vols., 8 vo., cloth, with a portrait; also in Philadelphia Library style of binding, sheep. These volumes contain the ablest productions of Mr. Webster, up to the time of his becoming a member of the Cabinet. His speeches are models of argumentative power and commanding eloquence. They are rich sources of instruction also to the student of letters, of history, of finance, of the theory of government, and to the active politician, and should be owned by every station, sect, and political denomination. Published and for sale by TAP PAN & DENNETT 114 Washington st., Boston, and for sale by the principal booksellers throughout the country.

T & D. also publish *Life of George Washington*. By Jared Sparks, 1 vol. 8 vo.—600 pages, with 14 fine steel and copperplate engravings, beautifully bound in rich cloth, stamped.

The *Life of Washington*, abridged, 2 vols. 12 mo. cloth. By Jared Sparks.

The *Works of Benjamin Franklin*, with notes, and a life of the author. In 10 vols. 8 vo. cloth and calf bindings. By Jared Sparks.

Life and Writings of George Washington, by Jared Sparks, 12 vols. 8 vo. cloth and calf bindings. Nov. 1—31.

SILK MACHINERY FOR SALE.

A QUANTITY of machinery for the manufacturing of Silk, is offered for sale at the State Prison, Sing Sing, N. Y., consisting of looms for weaving broad silks and braids, together with engines and reels for making cords, winding floss, sewing silks, and from cocoons; likewise a number of other machines used in the manufacturing of silk.

This machinery is now in practical operation at the Prison, and was constructed under the immediate superintendence of an experienced and skillful manufacturer, who still has the work under his charge, and is offered at private sale between this date and the 15th of Feb. 1844; if not disposed of by that time, will then be sold at public auction in New-York. For further particulars apply at the Prison, to

Dec. 1843—21.

WM. H. PECK, Agent.



FIELD SEED STORE.

THE subscriber continues to keep constantly on hand at his long established Seed Store, a supply of the best quality and kinds of Field Seeds, viz:

Red Clover, of the large and small growth, Timothy, Red Top, or Herd's Grass, Orchard Grass, Lucerne, or French Clover, White Clover, Trefoil, Kentucky Blue Grass, &c. &c.

Also, the different varieties of Wheat, as White Flint, Red Chaff, Mediterranean, and English—for sale in lots to suit purchasers at moderate prices, by ISRAEL RUSSELL, Feb. 1, 1844. 26 Front-street, New-York.

N. B. The following description of some superior English Wheat sown in the month of October last, the product of which will be for sale at the above Store, is given by a respectable English farmer in the State of New-Jersey, who sowed about eleven bushels, a sample of which can yet be seen. "It is called the Uxbridge White Wheat, and is the most noted Wheat they have in England, it being of fine quality, always commands a high price, as the flour is used by the biscuit bakers in London; it is great for yielding, and puts out a much larger ear than any wheat I have seen in this country. I saw when in England, three years ago, on my brother's farm in one field, 120 acres, that yielded 40 bushels and upwards to the acre. It grows very strong, and is not liable to be laid by heavy rains. I will warrant it free from any soil whatever. I did not see in the eleven bushels, a particle but Wheat; and I have sown it on Clover seed, on purpose that there shall be nothing but Wheat; and I will put nothing in the barn with it, so as to put it beyond the possibility of a doubt of its having any thing in it or getting mixed with other Wheat, which through carelessness is often the case. I have grown a great deal of it myself in England, and know from experience that for yield and quality, there is no Wheat to compete with it. Its general weight is from 64 to 67 lbs. per bushel. It is smooth chaff, and easy to thrash, which is not always the case with smooth chaff Wheat."

TO FARMERS.

THE subscriber is prepared to furnish farmers with Stone and Shell Lime, either slaked or unslaked, at a rate which will make it an object for them to use it liberally in the improvement of their lands, for which purpose he has sold large quantities during the past year. He refers to John Townsend, C. N. Remont, and W. H. Sotham, Esqrs. who have used his lime extensively. E. C. WARNER, Albany, Dec. 1, 1843.—3t.* Corner Market and Nuclea-sts.

FINE FARMS FOR SALE.

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